# Tasmanian Year Book



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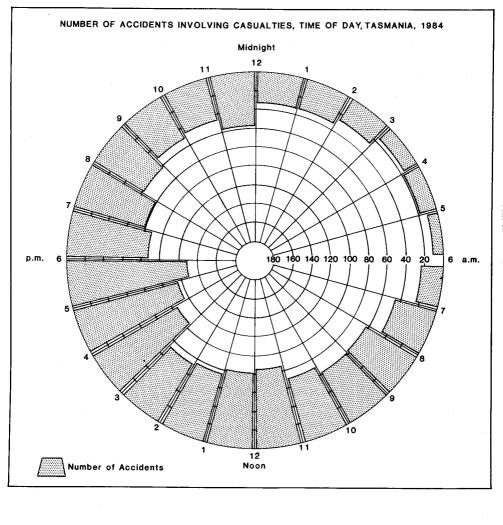
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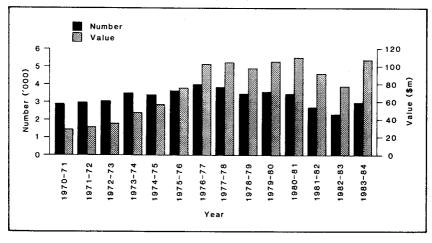
### CORRIGENDUM TASMANIAN YEAR BOOK 1985 Catalogue No. 1301.6

- 1. The graph on page 298 titled "Number of Accidents Involving Casualties, Time of Day, Tasmania, 1984" should appear on page 461.
- 2. The graph on page 461 should appear under the heading, "New Dwellings Completed (a), Tasmania" on page 298.

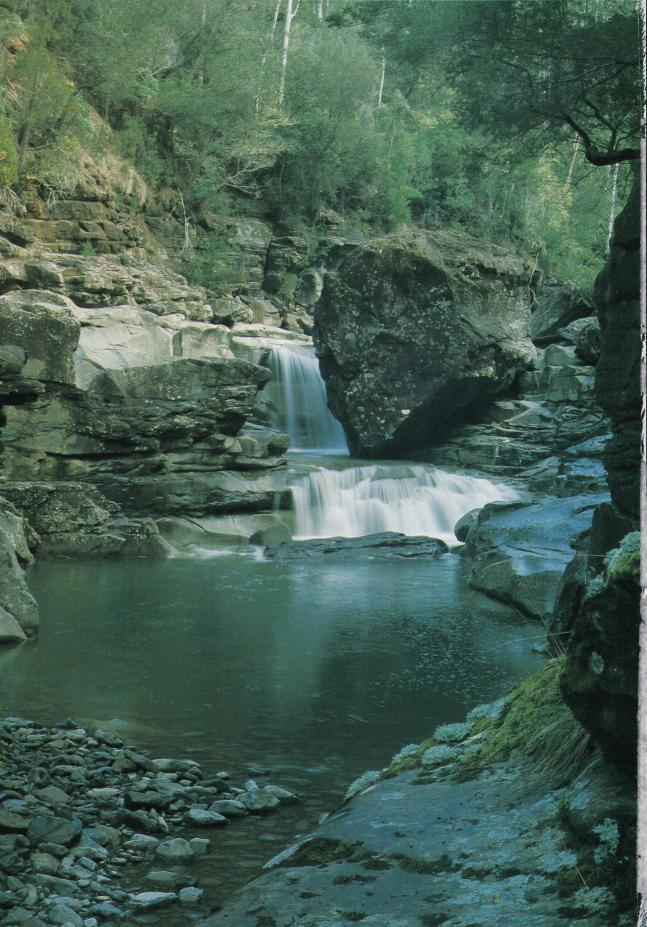
G.D. Cocking Deputy Commonwealth Statistician and Government Statistician of Tasmania



#### New Dwellings Completed (a), Tasmania



## TASMANIAN YEAR BOOK 1985



## AUSTRALIAN BUREAU OF STATISTICS TASMANIAN OFFICE

## **TASMANIAN**

## YEAR BOOK

No. 19: 1985

G. D. COCKING

DEPUTY COMMONWEALTH STATISTICIAN
AND GOVERNMENT STATISTICIAN OF TASMANIA

A.B.S. Catalogue Number 1301.6

National Library of Australia card number and ISSN 0082-2116

By Authority:
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VALENTINE PHOTOCOMPOSITION SERVICES, Clayton, Victoria
Proudly Printed in Australia by Valentine Graphics, Clayton, Victoria

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#### SYMBOLS AND OTHER USAGES

The following	symbols, where used, mean:
ASIC	Australian Standard Industrial Classification
n.a.	not available
n.e.c.	not elsewhere classified
n.e.i.	not elsewhere included
n.p.	not available for separate publication but included in totals where applicable
n.y.a.	not yet available
p	preliminary—figure or series subject to revision
r	figure or series revised since previous issue
••	not applicable
-	nil or rounded to zero
	break in continuity of the series (where drawn across a column between two consecutive figures)
(H)	located in Hobart Statistical Division
(S)	located in Southern Statistical Division
(H) (S)	parts in both Divisions.

Where figures have been rounded, discrepancies may occur between sums of the component items and totals.

Where reference is made to Acts of the Commonwealth or State Parliaments, the year quoted refers to the year in which the principal Act was passed; all subsequent amendments are inferred.

#### VALUES AND MEASURES

Values are shown in Australian dollars (\$) and/or cents (¢). Metric units have been substituted for imperial units. The use of dollar currency and metric units has not been confined merely to tables; for the sake of uniformity, they have also been introduced into historical texts.

#### LOCAL NAMES OF CERTAIN REGIONS

Tasmanians describe certain regions in a manner confusing to strangers; nevertheless this book employs local usage in most contexts. The chief peculiarities are: North-West Coast: The north coast from approximately Port Sorell, west to Cape Grim

is called the North-West Coast.

North-East Coast: The north coast from approximately Low Head, east to Cape Portland is called the North-East Coast. With most of the north coast referred to as either 'north-west' or 'north-east', the term 'north' is rarely applied to this coastal region.

West Coast: The Tasmanian West Coast may also refer only to the mining settlements.

West Coast: The Tasmanian West Coast may also refer only to the mining settlements of Queenstown, Rosebery, etc. In other contexts, the user may be thinking of inland mountains and rainforests rather than of a coastline.

Midlands: The true Midlands are probably the Central Plateau but the Tasmanian term means the rural area east of the Plateau and lying along the axis of the Hobart-Launceston road (the Midland Highway).

#### PREFACE

The Tasmanian Year Book is designed to present a comprehensive statistical and descriptive account of the physical environment and of the social, demographic and economic structure of the State, with particular emphasis on change and development in more recent years. In providing a general description of Tasmania, the Year Book includes authoritative information on almost every aspect of life in the State. The text and tables are supplemented by numerous maps, graphs and diagrams.

This edition of the Year Book (the nineteenth) includes a special article by Dr Ralph Chapman on Tasmanian Government Administration. Mr John Hepper has contributed an article on outdoor recreation in Tasmania and Ms Anne Ricketts has provided an article on the Lands Department.

An index of special articles precedes the General Index and covers all such articles included in this and previous issues of the *Year Book*.

As far as possible, the latest available statistics and significant developments which occurred during 1984 have been embodied in each chapter.

The Year Book has been compiled under the direction of Mr R. S. White, J.P., B.A., M.A.C.S. and Mr Chris Johnston, B.A., Ms Jenny Hoogerwerff and Mrs Jean Kelleher were responsible for compiling and editing this issue.

I gratefully acknowledge the valuable assistance given by officers of the various Commonwealth and State Government Departments and instrumentalities and by others who have contributed information. I also express my appreciation to Valentine Photocomposition Services and Valentine Graphics for their co-operation and enthusiasm in producing this *Year Book*.

Special thanks are due to the businesses, individuals, Commonwealth, State and local government authorities, other organisations, farmers and graziers who have supplied the basic data from which the statistics of the State have been compiled.

More detailed, and in many cases more up-to-date, statistics relating to most matters treated in the *Year Book* are available in the other statistical publications issued by the ABS. Information about ABS publications relating to Tasmania is provided in the section 'Publication of Tasmanian Statistics' which precedes the Index of Special Articles. In addition, unpublished statistics may be available on request. At the end of each chapter, a list of 'Further References' relevant to the subject matter of the chapter is included.

The Tasmanian Office provides an Information Service which, on request, supplies available statistical information and publications. All publications of the ABS and other statistical material are included in the Office Library which is open to the public for reference purposes. Businessmen, manufacturers, primary producers, government authorities, students and the public generally are invited to make full use of these services. Anyone requiring advice on what statistics are available or which publications may be of most use to them is invited to telephone the Information Officer on Hobart 20 9409.

G. D. COCKING

Deputy Commonwealth Statistician
and Government Statistician of Tasmania

Australian Bureau of Statistics HOBART, September 1985

## **CHAPTER 1**

## HISTORY AND CHRONOLOGY

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Settlement	 3
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### Chapter 1

### HISTORY AND CHRONOLOGY

#### DISCOVERY

#### The Period of Dutch Exploration, 1606-1642

In 1606, Captain William Jansz in the *Duyfken* was sent from Java to explore the islands of New Guinea and, crossing Torres Straits unawares, coasted along the west of Cape York Peninsula; this was the first of a series of voyages by Dutch captains who, in the next 30 years, acquired some knowledge of the western shores of the unknown land. Not all voyages were undertaken with the aim of exploration—Dirk Hartog's long journey along the western shore of Australia in 1616 resulted from his sailing too far east on the route from the Cape of Good Hope to Java. Some later captains on the same route even regarded the western Australian coast as a suitable landfall before turning north for Java—a commentary on the difficulty of navigation when longitude had to be established by dead reckoning.

In 1642, the Dutch East India Company despatched from Java an expedition of two vessels, the *Heemskirk* and *Zeehan*, under Captain Abel Tasman, with instructions to investigate the extent of the unknown land thought to exist between New Guinea and the western coast of Australia. One immediate aim of the Governor-General, Anthony Van Diemen, was to find a southern route from Java to Chile so that ships of the Company could either trade or plunder along the Pacific coast of South America; a question to be resolved was whether any land mass extending far south blocked such a route.

The original plan was to sail west to Mauritius, to run down to 52° or 54° south latitude and then to proceed east; assuming no land was discovered, it was then intended to turn north in either the longitude of eastern New Guinea or possibly of the Solomons. If Tasman had followed this plan in every detail he might have discovered the east coast of Australia, anticipating Cook's work by more than a century. As it turned out, the extreme southern latitudes were too hostile and accordingly Tasman was sailing east in latitude 42° south when he sighted the mountainous west coast of Tasmania on 24 November 1642.

The Dutch navigator skirted the south coast and made a landing on the east coast for water in Blackman Bay (from an anchorage south of Marion Bay). He then sailed north to St Patricks Head, crossed the Tasman Sea and discovered New Zealand, returning to Java by a route to the north of New Guinea. Tasman had thus performed the feat of circumnavigating Australia in a single voyage without once sighting the Australian continent.

In honour of the Governor-General of the Indies, he named the first discovery Van Diemen's Land, imagining it to be the most southern extension of the Australian continent, an illusion that was only completely dispelled by Bass and Flinders when they circumnavigated the island in 1798. The Dutch did not follow up the discoveries of Tasman or their other explorers because they were interested in establishing trading posts only among peoples with a higher degree of civilisation than the natives of Tasmania or mainland Australia appeared to possess. (Tasman's crew saw no natives in Tasmania but inferred their existence from sounds, cuts in trees and the smoke of fires.)

#### The Period of British and French Exploration, 1772-1798

One hundred and thirty years passed before Tasmania was visited again, this time by the French navigator Marion du Fresne in 1772; he virtually repeated Tasman's original landfall, skirted the south coast and came to anchor in the bay that bears his name (Marion). His visit is memorable for the first contact between Europeans and Tasmanians and for the slaying of the first native by gunfire. Du Fresne himself was killed by Maoris in New Zealand on the same voyage.

A year later, Captain Tobias Furneaux in the Adventure became separated from Captain Cook in the Resolution on the route to New Zealand and made for Tasmania to obtain water. He eventually anchored off Bruny Island in Adventure Bay but mistakenly believed himself to be in the area of Tasman's original landing which was at least 70 kilometres to the north-east. From this original error sprang a confusion in nomenclature which persists to this day (e.g. Frederick Henry Bay, first named in Tasman's record, appears on maps in an area that Tasman did not even see). Furneaux then sought to investigate the possibility of a strait separating Tasmania from the continent recently explored by Cook, but shoals in the islands bearing his name (Furneaux Group) caused him to abandon the project and make for New Zealand.

In 1777, Cook, on his third voyage, used the Adventure Bay anchorage without detecting Furneaux's navigational errors.

The settlement at Port Jackson in NSW in 1788 put Tasmania on a major sailing route, the First Fleet passing south of the island on its way there. To have sailed north of the island would have invited shipwreck on the Australian 'mainland' of which Tasmania was then believed to be part. In the same year, Captain William Bligh put into Adventure Bay with the *Bounty* on his way to Tahiti and to the famous mutiny; he had been on Bruny Island before, as Cook's sailing master.

Captain Cox of the *Mercury* anchored in the Bay known as Cox Bight in 1789, charted some of the south coast and explored the strait between Maria Island and the east coast.

The next visitor (1792) was Admiral Bruny D'Entrecasteaux commanding Recherche and Esperance and searching for La Perouse who had not been heard of since 1788 when he sailed from Botany Bay. The Admiral sailed north hoping to anchor in Adventure Bay, but a navigational error put his ships too far west with the happy result that he discovered the magnificent channel separating Bruny Island from the Tasmanian mainland and was the first to sail up the River Derwent. Leaving Tasmania, the expedition sailed as far west as Cape Leeuwin in Western Australia when it became imperative to take on water. It is an indication of the lack of knowledge then available that D'Entrecasteaux had to return to Adventure Bay to fill his casks. In the same year, Bligh put into Adventure Bay on his way to obtain breadfruit trees in the Pacific for transplanting in the West Indies.

The year 1794 was notable for the visit of Commodore John Hayes who had sailed from India with the *Duke of Clarence* and the *Duchess;* he explored the Derwent as far as Mt Direction and named Risdon Cove, later to be the site of the first settlement.

#### Tasmania an Island

Two voyages followed which established that Tasmania was an island. Surgeon George Bass in a whaleboat left Port Jackson in 1797, rounded Wilsons Promontory and discovered Western Port. The nature of tides and swells encountered told Bass that here was no bay but rather a strait of considerable magnitude. In 1798, Bass and Matthew Flinders were given the sloop *Norfolk* to decide the question for all time and they circumnavigated the island, commencing on a westerly course along the north coast where they discovered the Tamar Estuary.

#### Fear of the French

In the original annexation of Australian territory by Cook in 1770, Tasmania was excluded since the southern limit was proclaimed as 38° south latitude. Formal possession

DISCOVERY 3

of Tasmania was taken by Governor Phillip on 26 January 1788, when he read his commission to the people of the First Fleet at Sydney Cove. Now that it was established that Tasmania was an island, the authorities both in London and Sydney felt that some steps should be taken to block the French from making any claims to possession. The urgency of doing this was underlined by the arrival in the D'Entrecasteaux Channel of Admiral Baudin with the Geographe and Naturaliste in 1802. The expedition's navigator, Freycinet, charted Tasman and Forestier Peninsulas and correctly identified the Frederick Henry Bay of the Dutch era. The expedition then called at Port Jackson before sailing south into Bass Strait where it was intercepted at King Island by Lieutenant Robbins in the Cumberland. Announcing his intention boldly to the French Admiral, the Lieutenant disembarked his small company and formally annexed the island in the name of King George III. Governor King at Port Jackson who gave Robbins his instructions was not satisfied that merely formal acts of annexation would block the French indefinitely and decided that permanent settlements were required if British sovereignty was to be retained. To this decision can be attributed the settlement at Risdon (1803) and the Hobart and Port Dalrymple settlements of 1804.

#### Geography of the Original Landing

Tasman's anchorage was near Visscher Island and the first landing was made by longboats which passed through the narrows into Blackman Bay. The second landing occurred in the south-east of North Bay where a lagoon proved too brackish for filling water casks.

The last landing was made near Tasman Bay where the navigator had hoped to take formal possession of the new land. The surf being too rough to get the longboat ashore, the carpenter swam through the waves, planted the Dutch flag and then fought his way back to the longboat.

#### **SETTLEMENT**

#### The First Settlement at Risdon (1803)

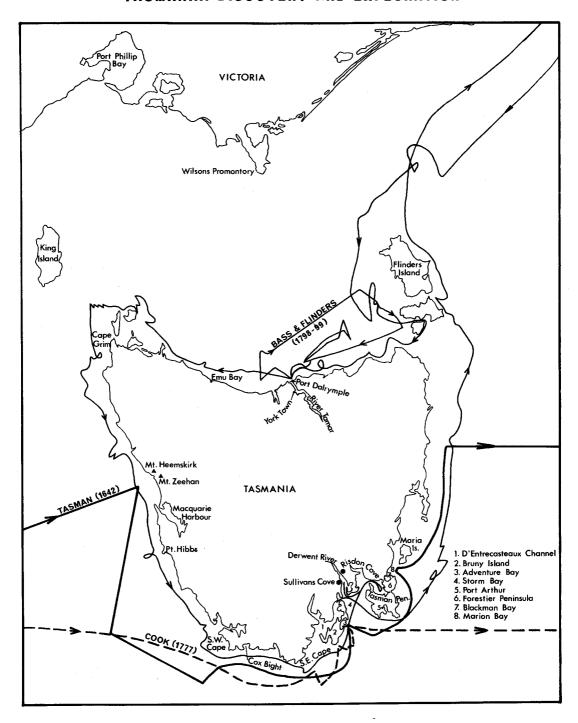
The original explorers of the Island (including the French) had very largely concentrated their attention on the south-east and, in particular, on the sea approaches to the Derwent. Faced with the necessity for establishing a settlement to assert British sovereignty, Governor King had a number of possible sites to consider, including King Island, Port Phillip and Port Dalrymple (the Tamar Estuary). His eventual choice was the area of the Derwent Estuary and he reported his intention to the Admiralty as follows:

'My reasons for making this settlement are the necessity there appears of preventing the French gaining a footing on the east side of these islands; to divide the convicts; to secure another place for obtaining timber with any other natural productions that may be discovered and found useful; the advantages that may be expected by raising grain; and to promote the seal fishery.'

Commissioned to make the Derwent settlement, Lieutenant John Bowen sailed from Sydney with the *Albion* and *Lady Nelson*; the two vessels separated in a gale but were anchored at Risdon by 11 September 1803, when Bowen went ashore. The slenderness of Governor King's resources is apparent from the fact that the settlers—free, convict and military—numbered only 49 and that the *Albion* was a British whaler under temporary charter (she caught three sperm whales on the voyage while becalmed).

The responsibility for the choice of the Risdon site attaches ultimately to Bass who had made detailed investigations of the Derwent in 1798 from the Norfolk. He had reported as follows: 'The land at the head of Risdon Creek, on the east side, seems preferable to any other on the banks of the Derwent.' It was not surprising, therefore, that Bowen's commission from Governor King directed him to locate the new settlement in the Risdon area. In fact, the site ultimately proved unsuitable due to the inadequate

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stream and the poor landing place; these handicaps were aggravated by the wretchedness of the human material at Bowen's disposal, a characteristic not altered when the camp was increased to nearly 100 persons.

If the settlement has any claim to fame, it derives from an encounter with natives who descended on the camp on a hunting expedition and who were fired on by the soldiers in a state of panic. Whether the future barbarities of inter-racial war could have been avoided is an open question but this encounter was the first phase of a struggle that ended in the extinction of a race.

The final act of the Risdon settlement was played on 9 August 1804, when the Ocean sailed for Port Jackson with Lieutenant Bowen and most of his people; Lieutenant-Governor Collins at the new settlement at Hobart had decided to close down the Risdon camp and held such a low opinion of these early colonists that he retained only 13 convicts and one free settler.

#### The Settlement at Hobart (1804)

If Lieutenant-Governor Collins had carried out his original instructions, then Hobart today might have been the name of the capital of Victoria situated on Port Phillip Bay. The British Cabinet, impressed by Governor King's warnings on possible French penetration, decided to carry out the occupation of Port Phillip direct from Britain and, to this end, commissioned Lieutenant-Colonel Collins (Royal Marines) to command an expedition in the *Calcutta* with the *Ocean* as tender to secure the strategic Bass Strait. Control of the Strait meant that the dangerous 1 100 kilometre journey around Van Diemen's Land was avoided and also prevented a hostile foreign power from threatening British sea lanes in the South Pacific.

The settlers eventually arrived, via Rio De Janeiro and the Cape of Good Hope, and formed a temporary camp near the site of the modern Sorrento township. For a variety of reasons, Collins was unhappy about the locality; he considered navigation hazardous, the soil poor and water inadequate. He was unwilling to develop promising land at the head of the bay due to the show of strength by large bands of natives and because of its distance from the open sea. Collins had seen the problems of isolation at Sydney and considered a settlement at the head of Port Phillip Bay unduly hazardous. With the wind in the wrong quarter a ship could be locked in the bay for several days thereby defeating the purpose of the settlement—a port to protect and control Bass Strait. Accordingly he wrote for advice to Governor King in Sydney and was left free to decide between the River Derwent and Port Dalrymple as possible sites for transfer of his command. He was probably swayed in his eventual choice of the River Derwent by its reputation as a safe harbour and the fact that Risdon had already been settled.

On 15 February 1804, Collins, with the first detachment from Port Phillip in the Lady Nelson and Ocean, anchored off the new settlement at Risdon. A quick inspection satisfied Collins that the site was quite unsuitable and he made his own reconnaissance, eventually selecting the area on the western bank known as Sullivans Cove and ordering that the expedition should be disembarked with all its stores in the vicinity of Hunters Island. In the same month, Collins reported to King that his two ships were 'lying within half a cable-length of the shore in nine fathoms of water'; the Lieutenant-Governor had selected gentle slopes for his settlement, located a fine stream running from Mt Wellington and found near the mouth of the stream depths of water which would accept the draught of any vessel of his day (or of the modern era).

The following table shows the early composition of the settlement at Sullivans Cove (but excludes details of the Risdon Camp):

Number Victualled at Sullivans Care 26 February 1904

TVUITIDEI	victualieu at Sullivalis	COVE, 20	rediuary	1004
Quality		Men		Women

Quality	Men	Women	Children
Military establishment	26	1	
Civil establishment	6	_	_
Settlers	13	5	13
Convicts	178	9	8
Supernumeraries	(a) 3		_
Total	226	15	21

(a) Includes one Aboriginal from Port Jackson.

The strength of the Colony was increased to 433 persons in June 1804 when the Ocean returned from Port Phillip, where it had taken aboard the balance of the original expedition. From the camp on Sullivans Cove has sprung the present city and port of Hobart.

David Collins was no amateur in the field of colonisation—he had sailed with Governor Phillip as Judge Advocate in the First Fleet in 1788 and had acted as Secretary to the Governor till 1796 when he returned to Britain with excellent recommendations.

#### The Settlement on the Tamar (1804)

While the Lieutenant-Governor was still in Port Phillip Bay, wondering where best to settle, he sent his namesake, William Collins, on a voyage of exploration to the Tamar Estuary. William Collins followed the river up as far as the Cataract Gorge and returned to Port Phillip with a good account of the possibilities of the Tamar for settlement; in his absence, however, the Lieutenant-Governor had made up his mind and was already preparing for the expedition to the Derwent.

Later Governor King received a despatch from Lord Hobart (Secretary of State for the Colonies) who, by a grotesque error, recommended the establishment of a settlement at Port Dalrymple 'upon the southern coast of Van Diemen's Land and near the eastern entrance of Bass 'Straits'. If Lord Hobart really meant 'south' then Collins' move to the Derwent had anticipated his wishes. However, since Collins had in fact left Port Phillip, was it not necessary to re-occupy Port Phillip or possibly to watch the Strait from Port Dalrymple? King knew that Hobart's despatch was written in ignorance of Collins' move and accordingly decided to use his own initiative without raising questions of geography with the Secretary for Colonies.

In Hobart's despatch, Lieutenant-Colonel William Paterson (New South Wales Corps) was nominated as Lieutenant-Governor of the new colony. Paterson set sail with 57 soldiers and convicts in the Integrity and the Contest but after a month of adverse winds both ships were forced back to Port Jackson. A second attempt was made using Buffalo, Lady Nelson, Francis and Integrity and increasing the party to 181. This time the Tamar was successfully entered but HMS Buffalo went aground and was, with some difficulty, brought to anchor in Outer Cove (George Town) on 4 November 1804. Lieutenant-Colonel Paterson decided that *Buffalo* must be immediately unloaded and accepted the Outer Cove site as a suitable camp while he undertook a more detailed reconnaissance of the Tamar.

Although he penetrated as far as the fertile site of Launceston, Paterson made the extraordinary decision to set up his headquarters at the head of West Arm and founded York Town, while still maintaining small establishments at Outer Cove, Low Head and Green Island. In deciding on York Town, one can only imagine that Paterson was guided purely by the strategic necessity, as was Collins at Sorrento, of being near to Bass Strait and that he gave little thought to the problem of soil fertility and cultivation.

In March 1806, Paterson was willing to admit that York Town was a most unsuitable site and he accordingly moved his headquarters to the present site of Launceston. Today, York Town and Risdon have one thing in common—the almost complete absence of any indication that settlements ever existed.

Paterson, before setting out on his expedition, had been involved in an argument as to his status, but Governor King had resolved the matter by dividing Tasmania at the 42° parallel and making Collins and Paterson sovereign in their respective halves, but subordinate to him as Governor.

#### **CHRONOLOGY**

#### **Preface**

The following chronology was originally compiled in two sections, the period 1642 to 1929 from a document specially prepared by officers of the State Archives, and the period beginning 1930 from a search of contemporary newspapers by Bureau officers. Greater detail is included in earlier editions of the *Year Book*.

In the record of more recent years, it was found impossible to describe purely Tasmanian events in isolation since certain national events necessarily form part of the history of a state within a federal system; this is particularly true with regard to some Commonwealth Government decisions, the state of the economy and industrial arbitration. On the other hand, there is the difficulty of deciding which events of a purely local character are sufficiently important to warrant inclusion. Some items have been introduced not because they are important but because they have a strong local flavour. This difficulty of selection is partly avoided by giving the record of the most recent years in more detail but inevitably such a policy results in matters of major and minor importance being mingled without distinction. It follows also that the second part of the chronology is limited largely to what the newspapers of the day considered important and that some events of greater significance may have escaped notice.

To round off the picture of any given year, there is a constant temptation to introduce events of world importance; as far as possible, this has been avoided except where such events had considerable local impact. In no way should the record which follows be interpreted as an 'official' chronology of the State; in actual fact, the record derives from two levels of subjective evaluation, firstly, the selection of items of importance by contemporary journalists and, secondly, the further selection of items from this narrowed field by the compilers of the chronology.

#### Chronology of Events from First Discovery of Tasmania

- 1642 Abel Janszoon Tasman, commanding Heemskirk and Zeehan, sighted west coast and named his discovery 'Anthony Van Diemenslandt'. Landings on Forestier Peninsula and near Blackman Bay on east coast.
- 1772 Landing of a party from Du Fresne's expedition at Marion Bay and affray with the Aboriginals.
- 1773 Tobias Furneaux in the Adventure, became separated from James Cook in Resolution and landed a party at Adventure Bay.
- 1777 James Cook anchored Resolution in Adventure Bay on third expedition.
- 1788 William Bligh anchored Bounty in Adventure Bay on first breadfruit expedition.
- 1789 John Henry Cox sailed Mercury from Cox Bight to Maria Island.
- 1792 William Bligh, on second breadfruit voyage, anchored *Providence* in Adventure bay. Bruny D'Entrecasteaux, commanding *La Recherche* and *L'Esperance*, discovered D'Entrecasteaux Channel and charted south-east coast.
- 1793 D'Entrecasteaux returned for further exploration of south-east coast. John Hayes, commanding Duke of Clarence expedition, explored Derwent River.
- 1798 Matthew Flinders and George Bass circumnavigated Tasmania.
- 1802 Nicholas Baudin, commanding Geographe and Naturaliste, explored south-east coast.
- 1803 John Bowen's party of 49 made first settlement at Risdon Cove.
- 1804 David Collins' settlement party landed at Sullivans Cove (Hobart). Aboriginals killed in an affray at Risdon. Risdon settlement closed down. William Paterson's settlement party landed at Port Dalrymple (Tamar Estuary).
- 1805 Collins forced by famine to cut rations by one-third.
- 1806 Settlers moved from York Town to Launceston area.
- 1807 Thomas Laycock's party crossed island overland from Port Dalrymple to Hobart. First Norfolk Island settlers shipped to Hobart in *Lady Nelson*.

- 1809 Governor William Bligh aboard *Porpoise* anchored in Derwent after NSW mutiny and embarrassed Collins with problem of jurisdiction.
- 1810 Lieutenant-Governor Collins' death. Issue of newspaper Derwent Star.
- 1811 Governor Lachlan Macquarie's first visit to Tasmania.
- 1812 Lieutenant-Governor Thomas Davey arrived. Northern settlement at Port Dalrymple made subordinate to Hobart. *Indefatigable* brought first shipload of convicts direct from England.
- 1815 Hobart and Port Dalrymple declared free ports for import of goods. Davey proclaimed martial law against bushrangers. James Kelly circumnavigated island in a whaleboat.
- 1816 First issue of Hobart Town Gazette.
- 1817 Succession of William Sorell as Lieutenant-Governor.
- 1818 Death of Michael Howe, notorious bushranger.
- 1820 Visit by John Thomas Bigge to conduct inquiry into colonial administration.
- 1821 Second tour by Governor Macquarie.
- 1822 Penal settlement established at Macquarie Harbour.
- 1823 Passage of British Act 'for the better administration of justice in NSW and Van Diemen's Land'.
- 1824 Inauguration of Supreme Court, Arrival of Lieutenant-Governor George Arthur.
- 1825 First Launceston newspaper, the Tasmanian and Port Dalrymple Advertiser, established. Tasmania constituted a colony independent of NSW. Establishment of appointed Executive and Legislative Councils. Departure of Governor Darling from Tasmania left Arthur with the authority of Governor (but not the title).
- 1826 Van Diemen's Land Co. sent first party to select land and establish farming operations. Appointment of Commissioners of Survey and Valuation.
- 1827 Lieutenant-Governor received a petition for trial by jury and some representation in Legislative Council.
- 1828 Passage of British Act 9 Geo. IV, cap. 83 which increased membership of Legislative Council.

  Martial law proclaimed against Aboriginals.
- 1829 First settlement at Emu Bay (Burnie).
- 1830 George Augustus Robinson began his mission to conciliate the Aboriginals. First use of juries in civil cases. Beginning of the 'Black Line', the military campaign to round up the Aboriginals. Publication of *Quintus Servinton*, first novel to be published in Australia. Port Arthur established as a penal settlement.
- 1831 Approval of British Government's new land regulations discontinuing free grants of land, and replacing them with land sales.
- 1832 First shipment of Aboriginals to Straits Islands. Establishment of the Caveat Board to settle land disputes and to confirm titles. Maria Island closed down as a penal settlement.
- 1833 Macquarie Harbour penal settlement closed down.
- 1834 Henty brothers from Launceston became first settlers in Victoria occupying land in Portland Bay
- 1835 John Batman sailed from Launceston to Port Phillip as agent for the Port Phillip Association. Tasmania divided into counties and parishes. Opening of Ross Bridge. Population estimated as 40 172 persons.
- 1837 Arrival of Sir John Franklin and assumption of office as Lieutenant-Governor.
- 1838 Sessions of Legislative Council opened to the public.
- 840 Cessation of transportation to NSW and consequent increase in numbers transported to Tasmania. Population estimated as 45 999 persons.
- 1841 Assignment System of convict discipline replaced by the Probation System. Rossbank Observatory for magnetic and meteorological observations established in Hobart.
- 1842 Tasmania created a separate Anglican diocese. Hobart made a city. Peak year for convict arrivals (5 329).
- 1843 Recall of Sir John Franklin and succession of Sir John Eardley-Wilmot.
- 1844 Transfer of Norfolk Island penal settlement from NSW to Tasmanian control.
- 1845 Resignation of the 'Patriotic Six' members of the Legislative Council, over the drain on colonial revenue for support of Imperial police.
- 1846 Recall of Eardley-Wilmot. Foundation of the Launceston Church Grammar and The Hutchins Schools.
- 1847 Succession of Sir William Denison. The Lieutenant-Governor re-appointed the 'Patriotic Six'.
- 1848 Tasmania now the only place of transportation in the British Empire.
- 1850 Foundation of the Anti-Transportation League. Population estimated as 68 870 persons.
- 1851 British Act provided for limited representative government. First elections for 16 non-appointed members of the Legislative Council.

- 1852 First payable gold found near Fingal. Elections held for first municipal councils in Hobart and Launceston.
- 1853 Arrival of last convicts to be transported. First Van Diemen's Land postage stamp (1d. Blue) issued.
- 1854 Bad floods throughout Colony, Passage of bill establishing responsible government.
- 1855 Succession of Sir Henry Fox Young; title now Governor. British Government approved Constitution Bill.
- 1856 Name of Van Diemen's Land changed to Tasmania. Advent of responsible self-government. Opening of new bi-cameral Parliament with W.T.N. Champ leading first government in the House of Assembly. Re-organisation of Police Department.
- 1858 Council of Education set up. Rural Municipalities Act passed.
- 1859 Charles Gould appointed to make geological survey of western Tasmania. Telegraph link established with Victoria.
- 1860 Population estimated as 89 821 persons.
- 1861 Succession of Colonel Thomas Gore Browne. Telegraph cable to Victoria failed.
- 1862 Promotion of scheme for a railway between Launceston and Deloraine.
- 1864 Arrival of first successfully transported salmon and trout ova.
- 1868 Visit by Alfred, Duke of Edinburgh. Primary education made compulsory.
- 1869 Succession of Charles Du Cane. Death of William Lanny, thought to be the last male full-blood Aboriginal. Death of Sir Richard Dry. New telegraph cable laid to Victoria.
- 1870 Withdrawal of remaining Imperial troops. Population 99 328 (Census).
- 1871 Opening of Launceston-Deloraine railway. Tin discovered at Mt Bischoff.
- 1872 Contract concluded for building Main Line Railway.
- 1873 Main Line Railway construction began. Start of economic recovery.
- 1874 Riots in Launceston in protest at rates levied for Launceston-Deloraine railway.
- 1875 Succession of Sir Frederick Weld.
- 1876 Race meetings established at Elwick. Gold nugget worth \$12 200 found at Nine Mile Spring. Death of Trugannini, thought to be last female full-blood Aboriginal. Main Line Railway opened for traffic.
- 1877 Port Arthur closed down as a penal settlement.
- 1878 Increased activity in exploration of West Coast.
- 1879 Settlement of constitutional issue known as the 'Hunt Case'. Rich lode of tin discovered at Mt Heemskirk.
- 1880 First telephone in Tasmania with line from Hobart to Mount Nelson Signal Station.
- 1881 Succession of Sir George Strahan. Population 115 705 (Census).
- 1882 Increased prospecting on the West Coast.
- 1883 Discovery of the 'Iron Blow' at Mt Lyell.
- 1885 Russian war scare followed by activity in improvement of defences. Formation of Mt Lyell Prospecting Association.
- 1887 Succession of Sir Robert Hamilton.
- 1890 Establishment of University of Tasmania.
- 1891 Collapse of Van Diemen's Land Bank; deep economic depression.
- 1892 Mt Lyell Mining Co. established.
- 1893 Succession of Viscount Gormanston.
- 1896 Establishment of Tattersalls Lottery by George Adams.
- 1898 Serious bush fires. Tasmanians four to one in favour of Federation at poll.
- 1899 Departure from Hobart of Southern Cross (Borchgrevinck) expedition to Antarctic.
- 1900 Departure of Tasmanian contingent to fight in the Boer War.
- 1901 Proclamation of the Commonwealth read. Polling for first elections to Federal Senate and House of Representatives. Succession of Sir Arthur Havelock. Population 172 475 (Census).
- 1903 Celebration of 100 years' settlement cancelled because of smallpox epidemic in Launceston. Suffrage extended to women.
- 1904 Succession of Sir Gerald Strickland at reduced salary.
- 1905 Experiments in wireless telegraphy between Tasmania and the mainland.
- 1907 New Public Library opened; built with gift from Andrew Carnegie.
- 1909 Succession of Sir Harry Barron. Potato crop wiped out by Irish blight. State's first Labor Government under John Earle.
- 1912 Disastrous fire at North Lyell Mine, Queenstown.

- 1913 Succession of Sir William Ellison Macartney.
- 1914 First aeroplane flight in Tasmania. Departure of first Tasmanian contingent to fight in Great War. Formation of Hydro-Electric Department.
- 1915 Serious bushfires.
- 1917 Establishment of electrolytic zinc works at Risdon and of Snug carbide works.
- 1918 End of Great War.
- 1919 First export of frozen meat.
- 1920 Visit by Edward, Prince of Wales. Purchase of site for Cadbury's chocolate factory at Claremont.
- 1921 Population 213 780 persons (Census).
- 1922 Completion of Waddamana power station.
- 1924 First superphosphate manufactured by Electrolytic Zinc Co. at Risdon.
- 1925 Discovery of osmiridium fields at Adamsfield.
- 1927 Inquiry into proposed bridge over Derwent. Visit by Duke and Duchess of York.
- 1929 Serious floods throughout Island. Establishment of automatic telephone system in Hobart. Beginning of economic depression.
- 1930 Export prices fell to half 1928 level. Australian pound devalued so that £1 sterling equalled \$A2.50 (£1/5s).
- 1931 Depression continued—10 per cent cut in federal basic wage. Initiation of austere Premier's Plan. Conversion loan to reduce rate of interest on internal federal debt by 22½ per cent. Census of population deferred.
- 1933 Commonwealth Grants Commission appointed to inquire into affairs of claimant States.
- 1934 Beginning of 35 years of continuous Labor Government with the election of the A.G. Ogilvie Ministry. Second phase of hydro-electric development commenced at Tarraleah and Butlers Gorge.
- 1936 Tasmania linked with Victoria by submarine telephone cable.
- 1937 Epidemic of poliomyelitis. Economic recovery evidenced by \$0.50 'prosperity' loading added to federal basic wage.
- 1938 Paper mill using native hardwoods established at Burnie. First turbines began operating at Tarraleah power station.
- 1939 Outbreak of World War II.
- 1940 Tasmanians sailed for Middle East with Australian 6th, 7th and 9th Divisions.
- 1941 Newsprint production began at Boyer on the Derwent. Tasmanians sailed for Malaya with Australian 8th Division.
- 1942 Uniform federal income tax commenced.
- 1943 The floating-arch Hobart Bridge opened for traffic.
- 1944 Pay-as-you-earn (PAYE) income taxation introduced from 1 July.
- 1945 End of World War II.
- 1946 Cessation of man-power controls. Rejection by Legislative Council of bill to grant Commonwealth Government price control powers for three years.
- 1947 Court action to stop bank nationalisation by Commonwealth Government. Demobilisation of forces completed. 'Displaced persons' commenced arriving from Europe. Population 257 078 (Census).
- 1948 Forty-hour week awarded to most workers from 1 January. Tasmanians voted 'No' almost two to one in referendum denying Commonwealth Government power over prices and rents. Legislative Council's denial of Supply forced dissolution of House of Assembly—Cosgrove Ministry returned to power.
- 1949 Compulsory X-rays introduced in fight against tuberculosis. Clark Dam at Butlers Gorge completed.

  Theatre Royal purchased by the Government. Sterling devalued by 30.5 per cent and Australian pound similarly devalued.
- 1950 End of federal petrol rationing. Dissolution of House of Assembly granted by Governor and Cosgrove Ministry returned to power. Communist Party Dissolution Bill passed by Federal Parliament.
- 1951 Communist Party Dissolution Act declared invalid by High Court. Double Dissolution of Federal Parliament. Referendum to give Commonwealth Government powers in regard to communism—'No' vote prevailed although Tasmanians expressed slight preference for 'Yes'.
- 1952 Single licensing authority established for hotels, clubs, etc. State's free hospital scheme ceased.
- 1953 In September, Arbitration Court abondoned system of quarterly adjustment of federal basic wage. State wages boards suspended quarterly basic wage adjustments.
- 1954 Royal visit by Queen. Bill passed to resolve deadlocks in House of Assembly. Foundation of the Metropolitan Transport Trust.
- 1955 Uranium ore discovered at Mt Balfour and Royal George. Bell Bay aluminium plant officially

- opened. Trevallyn and Tungatinah power schemes officially opened. Anti-Communist Labor Party (later DLP) formed.
- 1956 State wages boards' restoration of 'cost-of-living' adjustments effective from 1 February but these were later again suspended. Sir Ronald Cross granted dissolution of House of Assembly. Labor Party returned to power in State. Official opening of EZ Co.'s sulphate of ammonia plant. Centenary of self-government celebrated.
- 1957 Legislative Council rejected bill giving aid to private schools. First satellites—Sputniks I and II—seen over State. Centenary of Hobart's incorporation celebrated.
- 1958 Establishment of Rivers and Waters Supply Commission. Public Service Tribunal established as an industrial authority.
- 1959 First election to fill 35 seats in House of Assembly; Labor re-elected. New Commonwealth Government system of grants reduced claimant States to two—Tasmania and Western Australia. *Princess of Tasmania* commenced roll-on roll-off ferry service Melbourne to Devonport.
- 1960 Liapootah power station commissioned. Zeehan-Strahan railway closed. Inland Fisheries Commission created. First Tasmanian telecast. Australian 'give way to the right' rule introduced on roads.
- 1961 William Holyman, cargo container vessel, entered Bass Strait trade. Legislative Council rejected equal pay legislation.
- 1962 Catagunya turbines began producing electricity. State wages boards granted three weeks annual leave. State subsidies announced for municipal fluoridation schemes. Closure of Mt Lyell railway, Queenstown to Strahan.
- 1963 Abolition of State entertainments tax. Federal Court increased margins 10 per cent and granted three weeks annual leave. Universities Commission recommended medical school for Tasmanian University.
- 1964 TAA commenced intrastate air services. Tasman Bridge opened for traffic. Hobart's water supply fluoridated. Glenorchy raised to city status.
- 1965 Empress of Australia sailed from Sydney on first voyage to Hobart. Provisional driving licences introduced. Dental Nurse scheme for schools announced. D'Entrecasteaux scallop beds closed for 1965 season.
- 1966 Decimal currency introduced 14 February. Burnie-Launceston co-axial cable completed. Equal pay for certain State Public Service females. Breathalyser tests approved for use by police. STD extended to Tasmania.
- 1967 Bush fire disaster of 7 February resulted in 62 deaths and over 1 000 houses destroyed. Federal Arbitration Commission abolished basic wage and substituted total wage concept but basic wage retained in State awards. Mt Cleveland tin mining town of Luina completed. HEC water reserves only 16 per cent of normal; introduction of daylight saving and power rationing.
- 1968 HEC Repulse Dam on lower Derwent completed. Batman Bridge across lower Tamar opened. Commonwealth Government subsidy for apples and pears exported to UK and other countries. Full adult suffrage for Legislative Council elections from 1 July 1969. Capital punishment abolished.
- 1969 Parangana Dam (Mersey-Forth scheme) completed. North-West General Hospital opened at Burnie. State election resulted in 17 ALP, 17 Liberals, one Centre Party (Mr Lyons). Mr Lyons combined with Liberals to form coalition government; ended 35-year Labor rule in Tasmania. Full Bench of Federal Arbitration Commission granted equal pay to females performing equal work; female salaries to be raised to male salaries in stages. Copper smelter at Mt Lyell closed; concentrate sent to Japan and Port Pirie (SA) for treatment.
- 1970 First pyrites railed from Rosebery to Burnie sulphuric acid plant. EZ Co. to establish \$6.3m residue treatment plant. Royal visit. Parliament legislated to introduce permanent daylight saving. State premiers accepted Tasmanian formula for reimbursement in lieu of receipts duty.
- 1971 \$25m APPM Ltd Wesley Vale paper plant opened. \$9m expansion program at Comalco (Bell Bay) completed. Serious shipping strike. Population 390 413 persons (Census).
- 1972 K.O. Lyons resigned cabinet portfolios and ended Liberal-Centre Party Coalition. APPM Long Reach woodchip plant commenced production. ANL vessel *Princess of Tasmania* made her final trip to Tasmania. Mt Lyell Mining and Railway Company Ltd fired last charge at its West Lyell Open-cut Mine. Federal elections—ALP returned to power (after 23 years in Opposition). 300 million years old fossil of dragon fly discovered in Hellyer Gorge (west coast area).
- 1973 First train travelled the Bell Bay rail link. The first legal casino in Australia—Wrest Point—officially opened. Vote extended to 18-year olds. The \$121m Mersey-Forth HEC scheme officially opened. Storeys Creek tin mine closed down. The Blythe Star lost at sea while on charter to the Transport Commission. Tasmania voted in line with other Australian States on prices and incomes referenda—'No' to both.
- 1974 BHP announced \$28.5m expansion project for the Temco ferro-alloy plant at Bell Bay. Workers under State wages boards' awards granted four weeks annual leave. Royal Commission's report on urban transport advocated cessation of suburban rail services. High Court ruled Tasmanian tobacco tax valid, but method of collection invalid. Double dissolution of Federal Parliament. Federal Labor

- Government re-elected. Women under State wages boards' determinations awarded equal pay. Gordon Dam completed. No fault third party insurance scheme implemented.
- 1975 Tasmanian suburban rail services ceased. Bulk ore carrier *Lake Illawarra* rammed the Tasman Bridge, leaving a 128-metre gap and causing 12 deaths. TAB began operating. Transmission of colour television programs commenced in Tasmania. Federal Government takeover of Tasmanian railways. Temporary Bailey bridge across the Derwent opened. Hotels allowed to open for Sunday trading.
- 1976 Investigation of a site for a second Derwent crossing began. A government-commissioned inquiry recommended the abolition of the TCAE in Hobart and expansion of the northern campus. Sea cargo to and from Tasmania to be subject to a freight-equalisation scheme. South-West National Park doubled in size in line with South-West Management Plan proposals. The Neilson Labor Government returned to power with a reduced majority.
- 1977 Commonwealth Government confirmed Kingston as the site for Australia's new Antarctic Base. The Premier, Mr Nielson, announced his retirement from 1 December to become Tasmania's Agent-General in London. Tasman Bridge re-opened 8 October (closed since 5 January 1975). Mr Lowe replaced Mr Neilson as Premier. Drought conditions in many parts of the State the worst for 30 years.
- 1978 Large scale drug operation involving the smuggling of cannabis oil to Tasmania from Thailand uncovered by narcotics agents. The Tasmanian Railways came under full control of the Australian National Railways Commission. Australian National Railways Commission announced that all regular passenger train services in Tasmania would cease from the end of July. A major study of the State's coal reserves revealed a potential deposit of 251 million tonnes in the Fingal Valley.
- 1979 A joint Commonwealth-State Government study recommended the go-ahead on a \$28m second Hobart Bridge. The State Government to expand the South-West Conservation area to more than 20 per cent of the State's total area. Mr Charles Woodhouse appointed as the State's first Ombudsman. Tasmania's Parliamentary Hansard in operation for the first time. Mr Bill McKinnon (Labor), who lost his seat in the 28 July election, filed a petition in the Supreme Court claiming new Labor MHA in Franklin, Michael Aird, breached the Electoral Act by spending more than the statutory limit of \$1 500 on his election expenses, this began the so-called 'Electoral' or 'Constitutional Crisis'. The HEC released a report which recommended a \$1.36 billion power development scheme involving the Lower Gordon, Franklin and King Rivers to meet the State's electricity needs until the year 2000.
- 1980 Work commenced on the first stage of the second Hobart bridge. A by-election for the Denison electorate was held after the 'electoral crisis' of the 1979 State election (see 1979 Tasmanian Year Book pp 594, 595). The Treasurer introduced legislation into the House of Assembly to allow \$530m to be spent on the HEC's Pieman River development. East-West Airlines were given approval for the only direct Hobart-Sydney air service. The National Parks and Wildlife Service started a major advertising and promotion campaign aimed at short-circuiting the HEC's proposed Franklin-Lower Gordon power scheme. The State Government decided to save the Franklin River by opting for a more expensive set of hydro-power schemes in the South-West. The Franklin River would be included in a Wild Rivers National Park which will be extended to include the Davey River. The decision was to flood the Gordon at the junction of the Olga and to construct four single stage schemes on the King River. Parts of Southern Tasmania were facing the worst drought since white settlement. In the Federal election all five sitting Liberal MHR's were returned. Rae, Townley (Lib), Coates, Hearn (ALP) and Harradine were elected to the Senate. The Gordon-above-Olga power scheme was passed by the House of Assembly. The first direct flight from Hobart to Christchurch was made by Ansett Airlines. The Upper House Select Committee recommended the HEC's proposed Gordon-below-Franklin Scheme and rejected the Government proposed Gordon-above-Olga Scheme. A State constitutional crisis arose as the Legislative council voted that it had the power to change the power scheme bill to the Franklin rather than the Olga Scheme, contrary to the President's ruling.
- Bushfires at Zeehan destroyed 40 homes, and caused estimated damage of \$5 million. All-day Saturday trading was abandoned after a truce in the trading hours battle. The Premier, Mr Lowe, suggested a referendum to resolve the State's next power scheme. The State Government banned Saturday afternoon trading by companies employing more than 100 people on a statewide basis. The Commonwealth Government agreed to subsidise airfares to and from the State by 10 per cent following acceptance of the Holcroft report. The State Government announced the boundaries for the new Franklin-Lower Gordon Wild Rivers National Park to be proclaimed when the Gordon-above-Olga power scheme was approved by Parliament. The State Government announced the end of free public hospital treatment in Tasmania. Drought breaking rains persisted throughout the State. A rowdy meeting of more than 400 HEC workers called on the Premier, Mr Lowe, to resign or call an election over Tasmania's next power scheme. The Australian Labor Party's State Council directed Mr Lowe, to halt Tasmania's power deadlock and to hold a referendum on the issue. Approximately 3 000 pro-wilderness demonstrators marched peacefully against the construction of dams in the South-west region. A referendum was announced for November concerning the State's next power development. The Minister for National Parks and Wildlife, Mr Lohrey, was dismissed by the Premier, Mr Lowe, for publicly supporting a report which claimed hydro power

was not Tasmania's cheapest energy alternative and recommended a thermal power station fuelled by coal. Conservationists launched their referendum campaign by demanding the reinstatement of Mr Lohrey. The Premier, Mr Doug Lowe, was deposed and Mr Harry Holgate replaced him as Premier. Mr Lowe resigned from Cabinet, Caucus and the ALP and took his place in the House of Assembly as an independent. The State Labor Government lost its majority in the House of Assembly with the resignation of a supporter of Mr Lowe, Mrs Mary Willey. The Tasmanian Conservation Foundation called for an informal vote in the referendum by writing 'no dams' on the ballot paper. A Royal Commisson was appointed to investigate the powers of the Legislative Council. The State Government pledged that a dam would be built in the South-West whatever the referendum result. The referendum resulted in an extremely large informal vote but most supported the Gordon-below-Franklin option. State Parliament prorogued until 26 March 1982 without considering the results of the power referendum.

The South-West National Park, the Franklin-Lower Gordon Wild Rivers National Park and the Cradle Mt-Lake St Clair National Park were nominated by the Commonwealth Government for the World Heritage List; the proposed dam on the Franklin River lies within the nominated area. The State Government voted for the Gordon-below-Franklin hydro electric scheme rather than the Gordon-above-Olga scheme as its official choice. World wool price record was broken at the Launceston Wool Sales. Macintosh power station became operational — the first stage of the \$540m Pieman River power development. The Holgate Labor Government was defeated on a no confidence motion by a majority vote of the Liberal Opposition, two Labor defectors and a Democrat. Two reports, one an HEC analysis and the other by Brisbane engineering consultants, stated that the Gordon-below-Franklin hydro power would be cheaper than thermal power. The 1982 State election attracted a record total of 127 candidates. The Launceston Federal Country Club Casino received its official gaming licence and opened for business. The election resulted in the Liberal Party forming a Government in its own right for the first time in Tasmania's history. The new Premier, Mr Robin Gray, was sworn in by the Lieutenant-Governor, Sir Guy Green. The new Liberal Government removed 60 contract staff from their posts. Mr Ken Wriedt was unanimously elected leader of the Opposition. The ALP National Executive took control of the Tasmanian branch until at least March 1982. Legislation for the controversial \$453m Gordon-below-Franklin power scheme finally passed through Parliament. State Government requested Federal aid to help fund Tasmania's record deficit estimated at \$38m. The Federal ALP Conference decided to oppose the construction of the Gordon-below-Franklin scheme. Tasmania's public servants were asked to accept a total wage freeze or face retrenchments among their ranks. Work began on the \$11.8m CSIRO Marine Laboratories at Castray Esplanade. Premier Gray announced that police would act against conservationists who attempted to stop work on the Gordon-below-Franklin power scheme. The Minister for Primary Industry announced that the Tasmanian Apple and Pear Marketing Authority (TAMA) would be disbanded. The Federal Government rejected a request from the Premier, Mr Gray, to withdraw its nomination of the South-West wilderness for the World Heritage list. 3 000 State Government employees rallied in Franklin Square to protest at Government policies towards its workforce. The Government's budget measure to abolish death duties passed the House of Assembly. Fires raged through the south of the State in the wake of Hobart's hottest November day since 1937 (35.6°C). The Federal Labor Party announced a no-dams policy for a Federal Labor Government in a decision which split the party in the State. It was announced that Tasmanian police are to be given new powers in a bid to combat a blockade of dam site construction in the South-West by conservationists. The Senate select committee on South-West Tasmania came out against building the dam and put further pressure on Federal Cabinet to intervene. The Attorney-General, Mr Bingham, announced that Tasmania had formally applied to have its opposition to World Heritage listing heard by the World Heritage Committee in Paris and announced that he would go to Paris to lobby the Committee. Federal Government announced it would not intervene in the construction of the Gordon-below-Franklin dam. The World Heritage Commission placed Tasmania's endangered South-West wilderness area on its list. A total of 196 people were arrested for trespassing at the dam site.

1983 New drink-driving legislation reducing the permissible blood alcohol level for drivers from .08 to .05 and introducing random breath tests came into force. Conservationist leader Dr Bob Brown was elected to the House of Assembly on a countback following the resignation of Dr Norm Sanders. The Shell Co. of Australia revealed that coal mining at Mt Nicholas in the north-east could be sustained for 40 years with between 400 000 and 600 000 tonnes of coal being mined each year. Tasmania's unemployment rate rose to 11.4 per cent. The Premier, Mr Gray, rejected \$500 million, offered by the Commonwealth Government, to delay construction of the Gordon-below-Franklin dam. A cabinet reshuffle, in the Tasmanian Government, resulted in Mr Groom taking over the Police and Emergency Services portfolio from Mr Bingham and Mr Pearsall taking over the Housing portfolio from Mr Braid. Tasmania's biggest ever rally was held to protest against the damming of the Franklin River; an estimated 12 000 to 20 000 people attended. Commonwealth Opposition leader, Mr Hawke, pledged to stop construction of the Gordon-below-Franklin power scheme and offered financial assistance to meet the State's energy needs to the year 2000 as well as alternative employment for the HEC workforce should the Labor Party win government on March 5. 'Green Day', a day designated by the Tasmanian Wilderness Society as a day of active protest, resulted in a record number of arrests (228) in the south-west. Four Tasmanian cricketers

were selected to represent Australia in Sri Lanka and Zimbabwe. Hobart experienced its driest summer for 85 years. The Liberal Party was defeated by the Labor Party in the Federal election although Tasmania's five Liberal members of the House of Representatives were re-elected. Mr Fraser resigned as Leader of the Liberal Party and Mr Hawke was sworn in as Australia's new Prime Minister. The Tasmanian Wilderness Society reduced its representation in the south-west in anticipation of the new Commonwealth Labor Government honouring its commitment to stop the dam. The Tasmanian Government rejected the Commonwealth Government's first formal approach for negotiations on the Gordon-below-Franklin dam. Regulations under section 69 of the National Parks and Wildlife Act 1975, gazetted by the Commonwealth Government, made any further work on the Gordon-below-Franklin dam illegal. Mr Gray was adamant that work on the dam would proceed although the Tasmanian Government would abide by the High Court decision if it went against them. A Commonwealth writ, seeking an injunction to permanently stop work on the proposed Gordon-below-Franklin dam, and a Tasmanian writ seeking a declaration from the High Court that regulations gazetted under which the Commonwealth was acting were constitutionally invalid, were filed in the High Court. The Day Light Saving Bill, to permanently entrench a five month period, was passed by the House of Assembly. Major retailers predicted that almost 1 000 new jobs would be created in Tasmania if shop trading hours were extended to allow Saturday trading. Legislation to widen the Commonwealth's constitutional basis for stopping the Gordon-below-Franklin dam was introduced into Federal Parliament. The chairman of the Royal Hobart Hospital Board, Mr D. A. Kearney, resigned in protest at the State Government's handling of public hospitals. Major Tasmanian retailers were permitted to trade on Saturday afternoons in December only. The seven week strike by shearers over the use of wide combs ended in Tasmania. Charges against 1 300 Franklin River protesters were dropped because of the cost to the Government and difficulties in proving the charges. State Cabinet approved a multi-million dollar recreational development at Prospect in Launceston. Thirty candidates contested Legislative Council seats in the electorates of Queenborough, Pembroke, Tamar and West Devon. Those elected were Mr Peter McKay, Pembroke; Mr Jeff Coates, Tamar; Mr John Stopp, Queenborough; Mr Hugh Hiscutt, West Devon. The State Government announced its intention to introduce legislation to revoke or suspend the special licence under which Australian Paper Manufacturers operated in Tasmania, following the closure of their mills in the Huon and their inability to give proposals for permanent use of the forest resources. Mr Harry Braid was elected President of the Legislative Council. Sir Maurice Byers, QC, opened the Commonwealth's submission on the Gordonbelow-Franklin dam case to the High Court. A move by the State Government to allow major retailers to trade on Saturday afternoon in December was rejected by the Legislative Council. The Premier unveiled 20 new projects, costing \$143 million which could employ up to 1 200 men if the south-west dam was stopped. Plans were announced to set up a new development authority aimed at revitalising and expanding the Tasmanian economy; the Tasmanian Development Authority would replace the Department of Industrial Development and the Agricultural Bank. The lowest temperature yet recorded in Tasmania, -13°C, was registered. The High Court ruled that the Gordon-below-Franklin dam would not go ahead in a landmark decision which represented a significant expansion of Commonwealth powers. Alternative works to the Gordon-below-Franklin dam began, including Guildford-Hampshire and Cradle Mountain road links, the Mt Black deviation near Tullah, and the Lyell Highway 14 mile deviation. Mr Gray put compensation for the Gordon-below-Franklin dam at \$1 000 000 a week until 1991. Mr Gray called for a combined push by non-Labor States for a referendum to restore the balance of power between the Commonwealth and the States. The State Government budget deficit for 1982-83 was slashed by about \$5.5 million (42 pre-state). University of New Seath Wiles. (42 per cent). University of New South Wales physicists suggested Tasmania should begin planning for the introduction of large scale wind power technology. The Premier disassociated himself from a campaign by Tasmanian Federal Members of Parliament to over-rule the High Court's decision on the Gordon-below-Franklin dam. The Commonwealth Government committed \$23 585 000 compensation for job alternatives to the south-west dam. The State Government decided to speed up work on access roads for the \$460 million Henty-Anthony and King River hydro power schemes because of the Commonwealth Government's decision not to continue funding the Crotty Road construction. It also sought early approval for construction of the Henty-Anthony and King-Huxley-Newall power schemes. The Tasmanian retail industry predicted the loss of 700 jobs as a result of the \$11 wage increase granted by the chairman of the State Industrial Boards. The big users of electricity will face paying the real costs of energy from new hydro schemes. Mr Ashton stated if the HEC was asked to build a scheme to supply a bulk user, the power would be charged at the total cost of production and supply'. Shell Australia told the Premier that it is ready, willing and more than able to develop its Fingal Valley coal reserves for use in a thermal power station. As part of a \$120 million program the Commonwealth Government announced plans to spend \$4 million to construct 3 buildings in Tasmania to stimulate the building industry by developing new office space for Commonwealth departments. The Premier put the comprehensive, long-term south-west dam compensation at \$3 455 million. The Premier proposed that an independent arbiter be appointed to settle compensation disputes between the State and the Commonwealth. The Prime Minister, Mr Hawke, began a two day visit to Tasmania, he was welcomed to Tasmania's West Coast by No Dam and ALP supporters. The HEC formally recommended that the State Government build the Anthony and King River power schemes as Tasmania's next power developments. The State Budget hit smokers with a 13 cent per packet increase and people using credit cards or

making savings withdrawals with a 15 cent transaction tax. The Legislative Council took only 30 minutes to approve the \$549 million King and Anthony Power schemes. Australia made sporting history by winning the America's Cup. Cathy Franks was crowned Miss Tasmania 1984. The new Devonport \$6.5 million jet airport was officially opened. A Legislative Council Select Committee report recommended the formation of a greater Launceston by amalgamating the urban areas of five surrounding municipalities. CSR Ltd proposed a \$100 million development of its Rosevale coal deposits 25 kilometres west of Launceston to supply a coal fired thermal power station. The Westbury Council decided not to support in principle the development of a coal-fired thermal power station in the municipality. Russian interests began negotiating with the Commonwealth Government on a joint fishing venture off Tasmania, despite the State Government being opposed to such a venture. The Tamar Regional Master Planning Authority was concerned that the State Government had ruled out the Tamar Valley as a possible coal-fired power station site before a feasibility study had been conducted. A floating fish processing factory was planned for Triabunna possibly creating an extra 200 jobs for the East Coast. The greater Launceston proposal was rejected by four of the six municipalities involved in the referendum held to decide the issue. Conara Junction named as a possible site for a coal fired thermal power station. The township was recommended as the site after the completion of the Netz McClelland report. Two mainland companies involved in exploration and coal development joined forces to spend up to \$1 million evaluating black coal deposits at Woodbury. Stricter conditions for woodchipping were laid requiring woodchipping companies to make better use of their resources, reduce waste and pay greater attention to forest regeneration in harvested areas. The State Government, despite opposition from Tasmanian Wilderness Society, began collecting a \$50 levy from rafters on the Franklin River. Condor won line honours in the Sydney-Hobart yacht race after Nirvana was disqualified after a protest, lodged by Condor, was upheld; Challenge won the race on corrected time. Tasmania's road toll, 70 for 1983, was the lowest in 20 years. The inflation rate for Hobart fell dramatically; figures for the 1983 December quarter showed that the inflation rate was 7.8 per cent compared with 10.3 per cent for the 1982 December quarter.

1984 See Appendix B.

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See also the Index of Special Articles which precedes the General Index at the back of this Year Book for a listing of historical articles included in the various editions of the Tasmanian Year Book (entered under 'Historical Articles').

## **CHAPTER 2**

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## Chapter 2

#### PHYSICAL ENVIRONMENT

#### **GENERAL DESCRIPTION**

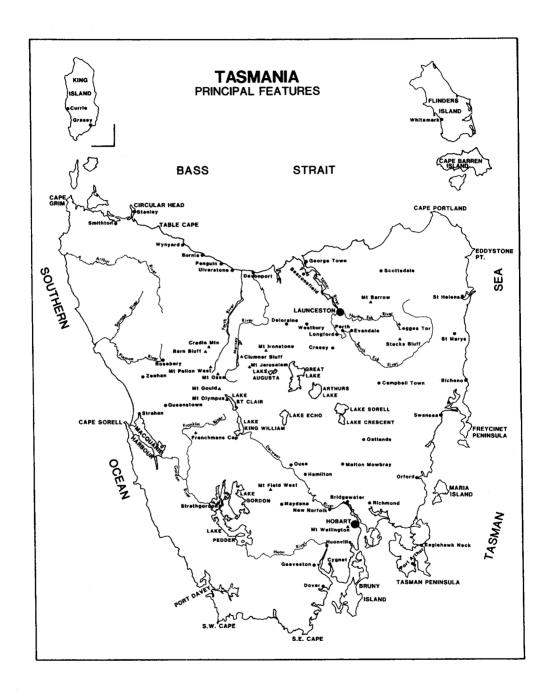
#### Location and Area

The State of Tasmania is a group of islands lying south of the south-east corner of the Australian mainland; the major island is Tasmania and the more important of the lesser islands are King, Flinders and Bruny. Roughly shield-shaped with the greatest breadth in the north, the Tasmanian mainland extends from 40° 38′ (the official northern boundary of Tasmania is 39° 12′) to 43° 39′ south latitude and from 144° 36′ to 148° 23′ east longitude. The coastline is bounded by the Southern Ocean on the south and west and the Tasman Sea on the east, while the approximately 240 kilometres wide Bass Strait separates the island from the Australian mainland. Macquarie Island, a part of the State, is situated at 54° 38′ south latitude, 158° 53′ east longitude and is bounded by the Southern Ocean.

The area of the whole State, including the lesser islands, is approximately 68 330 square kilometres or about 0.9 per cent of the total area of Australia (7 686 900 square kilometres); it is just under one-third the size of Victoria, the smallest mainland State, and is less than half the size of England and Wales.

Mainland Australia, extending as it does well north of the Tropic of Capricorn, and with much of its area in the zone of the sub-tropical anti-cyclones, is basically a warm, dry continent. Tasmania is in the temperate zone and practically the whole island is well watered with no marked seasonal concentration; there are no deserts or drought areas as found extensively on the adjacent mainland. Being south of latitude 40°, it is on the edge of the wind belt commonly known as the 'Roaring Forties' and, with South America the nearest land mass to the west, Tasmania's weather is subject at times to strong winds and heavy rain about the south and west coastal areas. Because Tasmania is the most southern State, there is a tendency to think of it as being close to the Antarctic but its latitude is matched, in the northern hemisphere, by that of Madrid (Spain) and Pittsburgh (USA). In addition, as Tasmania is an island, it is sheltered from the extremes of heat and cold experienced in these two centres. The effect of its insular position is illustrated by the variation between summer and winter mean temperatures in coastal towns—this rarely exceeds 8° Celsius. Comparing Hobart (Tasmania) with Melbourne (Victoria), mean maxima are some 3°C warmer and mean minima 1.5°C warmer in the Victorian capital.

Apart from the Great Dividing Range in the east, continental Australia is predominantly a land of low plateaux and plains with little relief. By way of contrast, Tasmania could legitimately be called the island of mountains, since it has the largest proportion of high country to its total area, compared with the other States. The distinctive feature of the island is not so much the height of the mountains—few exceed 1 500 metres—but rather the frequency with which they occur. The Australian Pilot, Vol. 11 describes Tasmania as 'probably the most thoroughly mountainous island on the globe'.



#### Principal Physical Features, Tasmania

The following table lists the principal mountains, lakes and rivers of Tasmania:

#### **Principal Physical Features**

Mountains					
Name	Height (metres)	Name	Height (metres)		
Mt Ossa	1 617	Mt Gould	1 491		
Legges Tor	1 573	Mt Jerusalem	1 491		
Barn Bluff	1 559	Mt Olympus	1 447		
Mt Pelion West	1.554	Frenchmans Cap			
Cradle Mountain	1.545	Mt Ironstone	1 443		
Stacks Bluff	1 527				

#### Lakes

Name	Area (square kilometres)	Name	Area (square kilometres)
Lake Gordon (a)	272	Lake St Clair	28
Lake Pedder (b)	241	Lake Pieman (a)	22
Great Lake (c)	170	Lake Rowallan (a)	9
Arthurs Lake (c)	64	Lake Rosebery (a)	7
Lake Sorell	52	Lake Barrington (a)	7
Lake King William (a)	41	Lake Murchison (a)	4
Lake Echo (c)	41	Lake Cethena (a)	4
Lake Mackintosh (a)	29		

#### Rivers

Name	Length (kilometres)	Name	Length (kilometres)
South Esk (d)	201	Huon	170
Gordon	185	Mersey	146
Derwent	182	Arthur	113

- (a) Man-made.
- (b) Man-made—inundated the much smaller natural Lake Pedder.
- (c) Natural lake enlarged by dam(s).
- (d) From source to confluence with North Esk; at this point the river becomes known as the Tamar. If the Tamar is included the length of the South Esk is a further 70 km.

#### PHYSIOGRAPHY

#### Introduction

Tasmania is an island of mountains and is unique among Australian States in being predominantly influenced by polar maritime air masses. From the point of view of settlement and development, these two factors have combined to create assets against which must be weighed certain liabilities. The island, a mere 296 kilometres from north to south and 315 kilometres from east to west, has a wide variety of mountains, plateaux and plains, of rivers, lakes, and tarns, of forest, moorland and grassland, of towns, farms and uninhabited (and virtually unexplored) country. The temperate maritime climate partly explains Tasmania being called the most English of all States but other factors operate to heighten the comparison—the pattern of agricultural settlement with orchards, hedges and hopfields; the lake country; the early freestone architecture still common in the east and south east and the roadsides and villages dotted with oaks, elms and poplars. Nature and the early settlers have provided the assets for a flourishing tourist industry which has been vigorously developed. Assured rainfall and mountain storages have also led to the development of hydro-electric power and, indirectly, to industry. The growth of forests, too, is promoted by suitable rainfall and temperature, and this forms the basis for

industries such as timber-milling, newsprint and other paper production and woodchipping.

The mountainous nature of the island is confirmed by surveys, which show six features exceeding 1 500 metres, 28 exceeding 1 220 metres and with a substantial part of the Central Plateau above 900 metres. The highest mountain is Mt Ossa (1 617 metres) some 16 kilometres north-west of Lake St Clair; north-west again from this peak lie Mt Pelion West (1 554 metres), Barn Bluff (1 559 metres) and Cradle Mountain (1 545 metres). In the Ben Lomond area, the principal features are Legges Tor (1 573 metres) and about 10 kilometres south, Stacks Bluff (1 527 metres). Each of these mountainous regions and a number of others have been set aside as national parks, two of which, Ben Lomond and Mt Field, are renowned for winter sport.

#### Water Resources

Fresh-water navigation has played very little part in Tasmania's development, the rivers being too fast-running, shallow or short. Of the four major ports, three are located on tidal estuaries—Hobart on the Derwent: Launceston on the Tamar and Devonport on the Mersey (Burnie has built a port on the open sea, protected by breakwaters). Rivers, however, are significant for three reasons: use of headwaters for electricity generation; domestic and industrial water supply; and irrigation. Hobart, for example, draws much of its water supply direct from the upper River Derwent without use of a dam and the river flow is adequate to service a population at least 10 times greater than that at present. The development of hydro-electric power has been based on full utilisation of the sources and tributaries of the Derwent with a chain of power houses stretching from Clark Dam on Lake King William to Meadowbank only 51 kilometres from Hobart. The naturally southward draining Great Lake waters are diverted northwards through the Poatina power station and discharged into the South Esk River system. The waters of the South Esk have been further harnessed at Trevallyn. In the north-west, the Mersey-Forth scheme exploits the Fisher, Mersey, Wilmot and Forth Rivers in a development spread over approximately 2 070 square kilometres. Stage I of the Gordon River power development scheme in the south-west was completed in 1978, creating the largest fresh-water storage in Australia. This does not exhaust the possibility of future hydro-electric development, as construction work on the Pieman River system is well advanced with completion scheduled for 1986.

To obtain a true perspective, it should be appreciated that large areas of the State cannot be cultivated because there is too much rainfall (in contrast with the mainland of Australia where often the reverse situation applies). Further, the mountainous terrain and accompanying highland climate have restricted farming to relatively small areas of suitable country, mainly river valleys, coastal plains and the lower plateaux. In 1982, farm statistics showed that 32 per cent of the State's area was occupied by rural holdings; 4.1 per cent of the area of rural holdings was under crop and a further 42.0 per cent under sown pasture. The remaining 53.9 per cent of rural holdings included bush runs, uncleared scrub or possibly land unsuitable for any rural purpose at all. A high proportion of the State's area not included in rural holdings is composed of forests, national parks, subalpine moorland and lakes.

#### Physiographic Regions

The physiographic regions of the State are as follows:

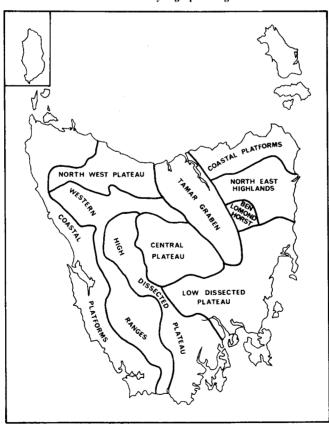
Central Plateau: The main feature is a relatively undissected, dolerite-capped plateau sloping generally south-eastward from an average level of 1 065 metres in the north to 610 metres in the south, and drained almost wholly by the Derwent system. The northern and eastern boundaries of the Plateau are the Great Western Tiers (paradoxically named since they lie in the central north of the island). This is known as the 'lake country' of the island and is one of the chief sources of hydro-electric power.

High Dissected Plateau: West of Lake St Clair, dolerite caps steeply-tilted sediments and the plateau is much dissected; it comprises a series of peaks and broken ridges. The coastlands in the extreme south of the region are rugged but in the D'Entrecasteaux Channel and Huon River areas, narrow coastal belts have been devoted to specialised agriculture.

Western Ranges: The high dissected plateau is bounded by a series of mountain ranges running parallel to the West Coast and in this region are located the State's principal mines. The south of the region is virtually uninhabited.

Western Coastal Platforms: Throughout almost the entire length of the West Coast, an uplifted and much dissected peneplain slopes westward from about 275 metres altitude, ending abruptly in cliffs more than 30 metres high. In the south of this region, superhumid button grass plains predominate, and the area is uninhabited. On the coastal plain south of the Arthur River, however, dairy cattle are wintered on agistment runs, while north of the river dairying begins to appear and swamps have been drained to allow farming.

North-West Plateau: North of the Western Ranges lies a plateau averaging nearly 610 metres altitude and important mainly for forestry; the coastlands derive mainly from basalt, giving rise to intensive mixed farming based on dairying, potatoes and crops for canning and freezing, such as peas and beans.



Tasmania's Physiographic Regions

The above regions derive from a classification by J. L. Davies, M.A., PhD., University of Tasmania.

Tamar Graben: This graben (rift valley) is the largest plain and the leading agricultural and pastoral district in the State; it ends in the drowned inlets of the Tamar and Mersey estuaries and of Port Sorell, in the north.

North-East Coastal Platforms: This region consists of undulating lowland but the soils are acidic and the land is used only for grazing.

North-East Highlands and Ben Lomond Horst: This region comprises mostly uplifted remnants of old fold mountains dominated by the 1 525 metre dolerite-capped plateau horst of Ben Lomond, an outlier of the Central Plateau. Here agriculture is largely confined to small basalt-derived basins. Some minerals are worked.

Low Dissected Plateau: In the south-east lies a low dissected dolerite plateau averaging perhaps 365 metres and used mainly for grazing. The northern coastlands of this region are narrow and also devoted to sheep, but the southern coastland is important for its specialised agriculture. At the extreme south of the region is the drowned estuary of the Derwent and the Tasman and Forestier Peninsulas.

#### AREA OF STATE

#### Sovereignty

On 17 December 1975, the High Court of Australia announced its decision on an action by the six States challenging the validity of the federal Seas and Submerged Lands Act. This Act gives the Commonwealth Government sovereignty over the Australian territorial sea, air space, sea-bed and subsoil; and over the continental shelf beyond the limits of the territorial sea. In their action, the State governments claimed that the sovereign powers given to the States over their land mass included sovereignty over the territorial sea adjacent to their coastlines for a distance of at least 4.8 km (3 miles). The full bench of the High Court dismissed the action by the States and upheld the validity of the Seas and Submerged Lands Act. Prior to this decision, Tasmania had claimed sovereignty (including mining and fisheries jurisdiction) over an area bound by the approximate rectangle 39° 12′ to 45° south latitude and 140° to 150° east longitude.

Since the boundary line between Tasmanian and Victorian sovereignty is defined as 39° 12' south latitude, numerous Bass Strait Islands, the chief being the Furneaux group, King Island and the Fleurieu, Hogan, Curtis and Kent groups, are part of Tasmania. In effect some Tasmanian territory (Rodondo and West Moncoeur Islands) is located only 13 to 16 kilometres from the Victorian coast.

Macquarie Island, site of an Antarctic research station, is also part of the State of Tasmania and is situated in 54° 38′ south latitude, 158° 53′ east longitude; its area is included in Esperance, a State coastal municipality.

#### Area of Major and Minor Islands

The official area of the State of Tasmania including many smaller islands (based on a 1963 survey) is 68 331 square kilometres (6 833 100 hectares). The next table shows the area of the main islands and the municipalities to which they belong:

Area	Λf	Icl.	ande.

Island	Area (square kilometres)	Municipality
Bruny	362	Bruny (a)
King	1 099	King Island (a)
Flinders	1 374	Flinders (a)
Prime Seal	10	Flinders (a)
Badger		Flinders (a)
Vansittart	6	Flinders (a)
Cape Barren	445	Flinders (a)
Clarke	113	Flinders (a)
Three Hummock	70	Circular Head
Hunter	74	Circular Head
Robbins	101	Circular Head
Maria	101	Spring Bay
Schouten	34	Glamorgan
Macquarie	123	Esperance
Total islands	3 922	
Mainland Tasmania	64 409	
Total Tasmania	68 331	

(a) Island municipality.

#### LAND TENURE

#### Introduction

Tasmania was proclaimed as Crown property when the first settlers arrived in 1803. In the period since their landing 37.9 per cent of the State's total area has been alienated by grant or sale; the Crown still owns 62.1 per cent.

# National Parks and Wildlife Service

The National Parks and Wildlife Act 1970 repealed the Animals and Birds Protection Act 1928 and the Scenery Preservation Act 1915 and placed the management and control of parks, reserves, fauna and flora in the hands of a single authority, the National Parks and Wildlife Service.

This authority has wide-ranging powers covering the management of parks, protection of fauna and flora, regulation of hunting, protection of Aboriginal relics, conduct of research, dissemination of information about conservation and enforcement of regulations under the *National Parks and Wildlife Act* and *Aboriginal Relics Act*. It is responsible for the planning and management of State Reserves (including national parks, nature reserves, Aboriginal sites and historic sites), game reserves and conservation areas. State reserves are the most highly protected category, in which no other authority can exercise its powers except with the special approval of Parliament. Conservation areas are set aside for the protection of flora and fauna (though other activities can also occur), while game reserves, a category introduced in 1977, permit controlled hunting of game or commercial species.

The Service is conducting surveys of selected marine areas around Tasmania with a view to the establishment of marine parks and, with the application of the Commonwealth *Historic Shipwrecks Act* to waters off Tasmania in February 1982, became the State agency responsible for implementation of that Act. Through its National Estate Division the Service is also responsible in Tasmania for administration of National Estate grants provided by the Australian Heritage Commission. Specialist advisory committees including representatives of other authorities, community groups and the general public assist the Director and Minister in a number of fields.

The value and significance of the areas managed by the Service are increasing rapidly as the public becomes more conscious of the need for protection of our environment, as pressure for exploitation increases on our finite natural resources and as tourism increases

its significance as a major source of income and employment for the State. Pressures for development are unfortunately leading to conflicts over resource use, particularly in relation to our forests and to the south-west of the State. The next few years will be crucial in determining whether the value of our national parks and reserves are fully appreciated and those natural and cultural features which give Tasmania its unique character are to be protected and cherished.

#### State Reserves

The following gives a brief description of the principal State reserves:

Asbestos Range National Park: Easily accessible from Launceston and Devonport, this park caters for family recreation. The park extends along the North Coast from Port Sorell to Greens Beach at the mouth of the Tamar. The vegetation includes eucalypt forests and coastal heathlands, as well as grassed areas which provide good grazing for many native animals including the reintroduced forester kangaroo.

Ben Lomond National Park. Is located 45 kilometres south-east of Launceston. This high plateau area includes Legges Tor and is Tasmania's principal skiing area. Walking and climbing are other popular activities in this park. The area is geologically interesting as Ben Lomond was the only part of north-east Tasmania to be affected by glaciation.

Cradle Mountain-Lake St Clair National Park: This is an area of rugged mountain scenery; it contains Tasmania's highest mountain (Mt Ossa) together with a number of major peaks, numerous lakes, deep gorges and several waterfalls. Flora and fauna in the park are representative of Tasmania's montane species and are in a largely untouched condition. The weather of the area is unpredictable and at times extremely severe—blizzards are common and may occur in mid-summer. The principal walking track extends from Cradle Valley (in the north) to Lake St Clair, a distance of 85 kilometres.

Franklin-Lower Gordon Wild Rivers National Park: This park extends from the headwaters of the Franklin River on the boundary of the Cradle Mt-Lake St Clair National Park in the north to the Olga-Davey divide (Southwest National Park boundary) in the south. It incorporates the former Frenchmans Cap National Park, Lyell Highway State Reserve and Gordon River State Reserve. The Franklin is an undisturbed wild river of world significance and offers a unique canoe or raft trip for some 120 km to Macquarie Harbour through spectacular gorges and ancient rainforest. An important recent archaeological discovery in Kutikina Cave on the Franklin indicates that man lived in the region at least as long ago as 20 000 years. Cruise boats out of Strahan provide a unique trip for visitors up the Lower Gordon River, featuring magnificent views and remarkable reflections in the River's dark waters. The boundaries of this park were significantly amended in September 1982 to provide for the construction of a hydro-electric scheme on the Gordon-below-Franklin. In 1983 the Commonwealth Government enacted legislation preventing construction of the scheme and its legality was upheld by the High Court. The original Wild Rivers National Park, along with the Southwest and Cradle Mt-Lake St Clair National Parks were included in the World Heritage List in December 1982, in recognition of their international significance.

Freycinet National Park: This park, situated on the East Coast, occupies the whole of Freycinet Peninsula together with Schouten Island and other offshore islands. A principal feature of the park is the 485 metres high red granite mountain range called The Hazards. The park provides pleasant walking throughout the year, although during summer water may be scarce.

Hartz Mountains National Park: Is located south-west of Geeveston. The main features of the park are Hartz Mountain, 1 253 metres high, several small picturesque lakes, and the superb eastward view from Waratah Lookout. The park includes a small sample of wet sclerophyll forest.

Maria Island National Park: Is situated off the East Coast from Orford and may be reached by ferry, chartered boat or aeroplane. Principal attractions include convict ruins from two penal settlements, the main one being at Darlington on the north-west

corner of the Island. Forester kangaroo, Bennetts wallaby and other Tasmanian fauna have been established on the Island and emu have been introduced. At the north-east corner of the Island high cliffs of richly fossiliferous limestone rise abruptly from the sea.

Mount Field National Park: This park, near Maydena and only 75 kilometres from Hobart, is the only southern ski resort in Tasmania and includes spectacular mountain scenery. Principal peaks are Mt Field East and West; other features include Russell Falls, Lake Dobson and numerous glacial lakes and tarns. The track to Russell Falls is a self-guiding nature walk which has been modified to make it accessible to disabled people.

Mt William National Park: Bounded on the east by long white sandy beaches of the North-East Coast, this park contains the largest single sample of coastal dry sclerophyll forest found in any reserve. It also contains 11 of the 14 different heath communities of north-eastern Tasmania, and over half the native species of Tasmanian vertebrate animals.

Port Arthur and Tasman Peninsula: This historic and scenic area is the best known and most visited tourist attraction in Tasmania. The area, in addition to the historic convict ruins of the Port Arthur penal settlement, contains many small reserves of either historic or scenic significance. Port Arthur, site of a convict settlement from 1830 to 1877, has a number of historic ruins. Recognising the importance of the site, the Commonwealth and State Governments are co-operating in a \$9.2 million conservation program which will assure the future of the numerous buildings and ruins and will provide new insights for visitors into the history of the settlement. Other historic sites include the old convict coal mines at Plunkett Point and Eaglehawk Neck where guards were stationed and a line of dogs tethered to prevent escape from the Peninsula. This area is also renowned for its spectacular coastal landforms, e.g. the Blowhole, Devils Kitchen, Tasman Arch and the Tessellated Pavement.

Southwest National Park: Is Tasmania's largest State reserve and covers 442 240 hectares of Tasmania's rugged south-west. It is a true wilderness area and encompasses the Western and Eastern Arthur Ranges, Federation Peak, Frankland Range, Mt Anne, Precipitous Bluff, Lake Pedder, part of the rugged south coast including Port Davey and Bathurst Harbour, and adjacent offshore islands. Dense scrub, which covers much of the area, frequent harsh weather and a scarcity of cleared tracks make this area the domain of the experienced, self-contained bushwalker.

Walls of Jerusalem National Park: This area of sheer dolerite cliffs and tranquil glacial lakes lies in the north-west of the Central Plateau. A walking track climbs up the Fish River Valley from the Mersey Valley and gives access to the Walls area through Herods Gate. The spectacular scenery, plentiful fauna and subalpine flora, make this a very popular bushwalking area. There are two huts and numerous good campsites.

State Reserves, Conservation Areas, and Game Reserves

The following table lists the Tasmanian national parks, State reserves, historic sites, Aboriginal sites, nature reserves, game reserves and conservation areas:

National Pa	National Parks, State Reserves, etc. at 30 June 1764						
Name	Area (ha)	Location	Description				
	Nation	al Parks					
Asbestos Range		North coast	Coastal heathland				
Ben Lomond		Central north	Mountainous, ski fields				
Cradle Mountain-Lake St Clair	131 915	Central	Mountainous, lake				
Franklin-Lower Gordon Wild Rivers	181 075	West	Wilderness, rivers				
Freycinet	10 010	East coast	Coastal, red granite				
Hartz Mountains		South	Mountainous, scenic				
Maria Island		East	Wildlife, convict station				
Mount Field		Central south	Mountainous, scenic				
Mount William		North east	Forester kangaroo, coastal				
Rocky Cape		North west	Coastal heath, banksia				
Southwest		South west	Rugged wilderness				
Strzelecki		Flinders Island	Mountainous, coastal				
Walls of Jerusalem		Central	Subalpine, scenic				

National Parks, State Reserves, etc. at 30 June 1984

# National Parks, State Reserves, etc. at 30 June 1984—continued

Name	Area (ha)	Location	Description
	State I	Reserves	
Alum Cliffs	1 540	Mole Creek	Scenic gorge and cliffs
Baldock Cave	43	Mole Creek	Caves, sclerophyll forest
Bradys Lookout	1	West Tamar	River, scenic
Brown Mountain—Remarkable Cave	61	Tasman Pen.	Coastal, scenic
Cape Pillar	3 200	Tasman Pen.	Coastal, sclerophyll forest
Cape Raoul	2 089	Tasman Pen.	Coastal, heath
Croesus Cave	47	Central	Caves
Derwent Cliffs	5	New Norfolk	Scenic
Devils Gullet	146	North	Scenic gorge
Eaglehawk Neck—Taranna	25	Tasman Pen.	Coastal, scenic
Eugenana	1	North west	Stratified cave deposit
Exit Cave	441	South	Large cave, glow worms
Fairy Glade	39	Central north	Scenic, fern glade
Ferndene	35	North	Scenic, fern glade
Fluted Cape	500	Bruny Island	Coastal, sclerophyll forest
North Falls	55	North central	Waterfall
Gunns Plains Cave	10	North west	Caves
Hastings Caves	61	South	Caves, geology
Hellyer Gorge	569	North west	Scenic, rainforest
Henty Glacial Moraine	1	West	Geology
Holwell Gorge	121	Central north	Scenic gorge
Ida Bay	425	South East	Scenic reserve, railway
Junee Cave	20	Central north	Cave
Kentford Forest	37	King Island	Relict eucalypt forest
King Solomon Cave	164	Central north	Caves
Kubla Khan Cave	160	North central	Caves
Labillardiere	2 332	Bruny Island	Coastal, dry sclerophyll forest
Liffey Falls	101	North central	Scenic waterfall
Lookout Rock	2	East coast	Coastal, scenic
Marakoopa Cave	71	North central	Caves, geology
Marriotts Falls	121	South central	Waterfall
Mount Arthur	4	Tasman Pen.	Scenic lookout
Mount Barrow	459	North east	Mountain
Mount Barrow Falls	81	North east	Waterfall
Mount Montgomery	299	North west	Scenic
Murchison Highway	452	West	Scenic road, rain forests
Notley Gorge	11	North	Scenic fern gully
Palmers Hill Lookout	1	Tasman Pen.	Scenic
Pieman River	3 328	West coast	Scenic river
Port Davey	17	South west	Scenic foreshore coast
Roger River	174	North west	Scenic, rainforest
St Columba Falls	314	North east	Waterfall
St Marys Pass	273	North east	Scenic
St Patricks Head	150	North east	Scenic
Steppes	48	Central	Homestead, dry sclerophyll
Stawarta Barr		<b></b>	forest
Stewarts Bay	78	Tasman Pen.	Scenic foreshore
Tasman Arch Tessellated Pavement	138	Tasman Pen.	Coastal scenery
	4	Tasman Pen.	Scenic, geology
The Nut	59	North west	Scenic, landmark
Thermal Springs	1	Central north	Geology
Trowutta Caves	66	North west	Caves, limestone
Zeehan—Renison Bell	24	Bruny Island	Scenic, forest
zechan—Remson Ben	110	West	Scenic road
	Histori	ic Sites	
Batchelors Grave	Small	Taroona	Historic grave
Callington Mill	Small	Oatlands	Historic mill
	214	Tasman Pen.	Convict mine
Coal Mines	417		
	1	King Island	Historic building
Coal Mines  Currie Lightkeepers Residence	1 Small	King Island Hobart	Historic building Historic home
	1 Small Small	King Island Hobart South	Historic building Historic home Historic monument

# LAND TENURE

# National Parks, State Reserves, etc. at 30 June 1984—continued

Name	Area (ha)	Location	Description
	Histor	ic Sites	
D'Entrecasteaux Watering Place	1	South	Site of early landing
Entally House	38	Central north	Historic home
Female Factory	Small	Hobart	Historic prison site
George III Monument	10 4	South North west	Memorial to ship wreck, flora
Kangaroo Bluff	3	Bellerive	Van Diemen's Land Co. house Historic fort
Lyons Cottage	Small	Stanley	Historic cottage
Mt Direction	180	Tamar	Early semaphore station
Oyster Cove	30	South	Aboriginal station
Point Puer—Crescent Bay	53	Tasman Pen.	Historic, scenic coast
Port Arthur	113	Tasman Pen.	Convict ruins
Richmond Gaol	1	Richmond	Convict gaol
Risdon Cove	3	Hobart, east	Sight of first settlement
Ritchies Mill	Small 1	Launceston	Old water mill Convict station site
Sarah Island	6	Ross Macquarie	Convict station site
Sarah Island	U	Macquarie Harbour	Site of convict station
Shot Tower	3	Taroona	Historic tower
Strahan Customs House	Small	West coast	Historic building
Sydney Cove	53	Furneaux	Historic shipwreck
Tasman Monument	Small	Tasman Pen.	Monument to discoverer
Toll House	Small	New Norfolk	Historic building
Waubadebars Grave	Small	Bicheno	Aboriginal grave
Wybalenna	126	Flinders Is.	Aboriginal station
York Town	2	North Tamar	Site of early settlement
	Nature	Reserves	
Albatross Island	33	Bass Strait	Seabird breeding
Bass Pyramid	Small	Bass Strait	Seal breeding
Betsy Island	181	South east	Scientific reference
Big Green Island	270	Furneaux	Cape Barren Geese
Black Pyramid Rock	40 1 350	North west Furneaux	Seabird rock Bird islands
Coal River Gorge	209	South	Scenic
Curtis Island	149	Bass Strait	Ecological reference
Diamond Island	5	East coast	Penguin rookery
Dismal Swamp	100	North west	Blackwood forest
East Kangaroo Is.	200	Furneaux	Cape Barren Geese
East Risdon	44	Hobart, east	Rare eucalypts
Foster Islands	48 5	North east North east	Bird islands Bird islands
Green Island	5	D'Entrecasteaux	Ecological reference
	3	Channel	Leological reference
Green Point	22	South east	Research
Hippolyte Rocks	5	South east	Seal breeding
Hospital Creek	22	South east	Rare endemic plant
Ile des Phoques	7 25	East coast Flinders	Seal breeding Cape Barren Goose breeding
Judgment Rocks	Small	Bass Strait	Seal breeding
Lavinia	4 622	King Island	Heath, dunes
Lime Bay	1 310	Tasman Pen.	Dry schlerophyll forest
Low Islets	8	Furneaux	Australian pelicans
Macquarie Island	12 785	Sub Antarctic	Research wildlife
Moriarty Rocks	127	Bass Strait	Seal breeding
Native Point	127 Small	Tamar Bass Strait	Relict forest Seal breeding
Penguin Islet	Smail 4	Bass Strait Bass Strait	Seabird breeding
Reid Rocks	Small	Bass Strait	Seal breeding
Rodondo Island	80	Bass Strait	Ecological reference
Tenth Island	ì	Bass Strait	Seal breeding
The Doughboys	20	Bass Strait	Seabird breeding
Three Hummock Island	7 284	North west	Sclerophyll forest, heath

# National Parks, State Reserves, etc. at 30 June 1984—continued

Name .	Area (ha)	Location	Description
	· · · · ·	Reserves	
	22	NT	0 11 1
Three Sisters-Goat Island	37	North west	Seagull rookery
TruchanasWest Moncoeur Island	406	South west	Huon Pine forest
west Moncoeur Island	10	Bass Strait	Seal breeding, ecological refer-
Wright Rock	9	Bass Strait	ence Seal breeding
	Aborigi	nal Sites	
Mount Cameron West	530	West coast	Aboriginal petroglyphs
Sundown Point	132	West coast	Aboriginal petroglyphs
Trial Harbour	132	West coast	Aboriginal petroglyphs
West Point	580	West coast	Aboriginal occupation site
	Game	Reserve	
Diad Island	-		N. 4. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1.
Bird Island	65	Bass Strait	Muttonbird rookeries
Bruny Island Neck	1 450 983	South Midlands	Lagoons, coastal heath
Lake TiberiusLittle Dog Island		Midlands	Waterfowl lagoon
New Year Island	50	Furneaux	Muttonbird rookeries Muttonbird rookeries
Petrel Island	112 50	King Island	Muttonbird rookeries  Muttonbird rookeries
Stack Island	30	Bass Strait Hunter Group	Muttonbird rookeries
Steep Island	30	Hunter Group	Muttonbird rookeries
steep island	·	tion Areas	Muttoliona rookeries
Wildlife sanctuaries under National Parl			
Asbestos Range Brigg Islet	Small Small	North coast	Coastal heathland
		Furneaux	Bird island
Cat Island	30	Furneaux	Bird island
Cat Island	30 23 250	Furneaux Central	Bird island Alpine vegetation
Cat Island Central Plateau Chalky Island	30 23 250 36	Furneaux Central Furneaux	Bird island Alpine vegetation Bird island
Cat Island Central Plateau Chalky Island	30 23 250	Furneaux Central	Bird island Alpine vegetation
Cat Island	30 23 250 36	Furneaux Central Furneaux	Bird island Alpine vegetation Bird island In Southwest Conservation Area
Cat Island	30 23 250 36 41	Furneaux Central Furneaux South	Bird island Alpine vegetation Bird island In Southwest Conservation Area
Cat Island Central Plateau Chalky Island Cockle Creek Cradle Mountain-Lake St Clair Egg Islands	30 23 250 36 41	Furneaux Central Furneaux South	Bird island Alpine vegetation Bird island In Southwest Conservation Area To be added to a National Parl
Cat Island Central Plateau Chalky Island Cockle Creek Cradle Mountain-Lake St Clair Egg Islands Gull Island	30 23 250 36 41 4 128	Furneaux Central Furneaux South North Huon	Bird island Alpine vegetation Bird island In Southwest Conservation Area To be added to a National Parl Estuarine, wetland
Cat Island Central Plateau Chalky Island Cockle Creek Cradle Mountain-Lake St Clair Egg Islands Gull Island Lackrana	30 23 250 36 41 4 128 32	Furneaux Central Furneaux South North Huon Furneaux	Bird island Alpine vegetation Bird island In Southwest Conservation Area To be added to a National Parl Estuarine, wetland Bird island
Cat Island Central Plateau Chalky Island Cockle Creek Cradle Mountain-Lake St Clair Egg Islands Gull Island Lackrana Lake Sorell	30 23 250 36 41 4 128 32 220	Furneaux Central Furneaux South  North Huon Furneaux Flinders Island	Bird island Alpine vegetation Bird island In Southwest Conservation Area To be added to a National Parl Estuarine, wetland Bird island Cape Barren Goose refuge Sclerophyll forest To be added to a Nature Re
Cat Island Central Plateau Chalky Island Cockle Creek Cradle Mountain-Lake St Clair Egg Islands Gull Island Lackrana Lake Sorell Lavinia	30 23 250 36 41 4 128 32 220 198 258	Furneaux Central Furneaux South  North Huon Furneaux Flinders Island Central King Island	Bird island Alpine vegetation Bird island In Southwest Conservation Area To be added to a National Parl Estuarine, wetland Bird island Cape Barren Goose refuge Sclerophyll forest To be added to a Nature Re serve
Cat Island Central Plateau Chalky Island Cockle Creek Cradle Mountain-Lake St Clair Egg Islands Gull Island Lackrana Lake Sorell Lavinia Liffey Falls	30 23 250 36 41 4 128 32 220 198 258	Furneaux Central Furneaux South  North Huon Furneaux Flinders Island Central King Island	Bird island Alpine vegetation Bird island In Southwest Conservation Area To be added to a National Parl Estuarine, wetland Bird island Cape Barren Goose refuge Sclerophyll forest To be added to a Nature Re serve To be added to a Scenic Reserve
Cat Island Central Plateau Chalky Island Cockle Creek Cradle Mountain-Lake St Clair Egg Islands Gull Island Lackrana Lake Sorell Lavinia Liffey Falls Logan Lagoon	30 23 250 36 41 4 128 32 220 198 258 7 2 256	Furneaux Central Furneaux South  North Huon Furneaux Flinders Island Central King Island  North central Flinders Island	Bird island Alpine vegetation Bird island In Southwest Conservation Area To be added to a National Parl Estuarine, wetland Bird island Cape Barren Goose refuge Sclerophyll forest To be added to a Nature Re serve To be added to a Scenic Reserve Wetland, marsh
Cat Island Central Plateau Chalky Island Cockle Creek Cradle Mountain-Lake St Clair Egg Islands Gull Island Lackrana Lake Sorell Lavinia Liffey Falls Logan Lagoon Medeas Cove	30 23 250 36 41 4 128 32 220 198 258 7 2 256 81	Furneaux Central Furneaux South  North Huon Furneaux Flinders Island Central King Island  North central Flinders Island North central	Bird island Alpine vegetation Bird island In Southwest Conservation Area To be added to a National Parl Estuarine, wetland Bird island Cape Barren Goose refuge Sclerophyll forest To be added to a Nature Re serve To be added to a Scenic Reserve Wetland, marsh Estuarine, marsh
Cat Island Central Plateau Chalky Island Cockle Creek Cradle Mountain-Lake St Clair Egg Islands Gull Island Lackrana Lake Sorell Lavinia Liffey Falls Logan Lagoon Medeas Cove Mile Island	30 23 250 36 41 4 128 32 220 198 258 7 2 256 81 8	Furneaux Central Furneaux South  North Huon Furneaux Flinders Island Central King Island  North central Flinders Island North central Flinders Island	Bird island Alpine vegetation Bird island In Southwest Conservation Area To be added to a National Parl Estuarine, wetland Bird island Cape Barren Goose refuge Sclerophyll forest To be added to a Nature Re serve To be added to a Scenic Reserve Wetland, marsh Estuarine, marsh Bird island
Cat Island Central Plateau Chalky Island Cockle Creek Cradle Mountain-Lake St Clair Egg Islands Gull Island Lackrana Lake Sorell Lavinia Liffey Falls Logan Lagoon Medeas Cove Mile Island Moulting Lagoon	30 23 250 36 41 4 128 32 220 198 258 7 2 256 81 8 512	Furneaux Central Furneaux South  North Huon Furneaux Flinders Island Central King Island  North central Flinders Island North east Furneaux East	Bird island Alpine vegetation Bird island In Southwest Conservation Area To be added to a National Parl Estuarine, wetland Bird island Cape Barren Goose refuge Sclerophyll forest To be added to a Nature Re serve To be added to a Scenic Reserve Wetland, marsh Estuarine, marsh Bird island Brackish lagoon
Cat Island Central Plateau Chalky Island Cockle Creek Cradle Mountain-Lake St Clair Egg Islands Gull Island Lackrana Lake Sorell Lavinia Liffey Falls Logan Lagoon Medeas Cove Mulle Island Moulting Lagoon Mt William	30 23 250 36 41 4 128 32 220 198 258 7 2 256 81 8 512 94	Furneaux Central Furneaux South  North Huon Furneaux Flinders Island Central King Island  North central Flinders Island North ceast Furneaux East North east	Bird island Alpine vegetation Bird island In Southwest Conservation Area To be added to a National Parl Estuarine, wetland Bird island Cape Barren Goose refuge Sclerophyll forest To be added to a Nature Re serve To be added to a Scenic Reserve Wetland, marsh Estuarine, marsh Bird island Brackish lagoon To be added to a National Parl
Cat Island Central Plateau Chalky Island Cockle Creek Cradle Mountain-Lake St Clair Egg Islands Gull Island Lackrana Lake Sorell Lavinia Liffey Falls Logan Lagoon Medeas Cove Mile Island Moulting Lagoon Mt William Night Island	30 23 250 36 41 4 128 32 220 198 258 7 2 256 81 8 512 94	Furneaux Central Furneaux South  North Huon Furneaux Flinders Island Central King Island North central Flinders Island North central Furneaux East Furneaux Furneaux	Bird island Alpine vegetation Bird island In Southwest Conservation Area To be added to a National Parl Estuarine, wetland Bird island Cape Barren Goose refuge Sclerophyll forest To be added to a Nature Re serve To be added to a Scenic Reserve Wetland, marsh Estuarine, marsh Bird island Brackish lagoon To be added to a National Parl Bird island
Cat Island Central Plateau Chalky Island Cockle Creek Cradle Mountain-Lake St Clair Egg Islands Gull Island Lackrana Lake Sorell Lavinia Liffey Falls Logan Lagoon Medeas Cove Mile Island Moulting Lagoon Mt William Night Island Dakleigh Creek	30 23 250 36 41 4 128 32 220 198 258 7 2 256 81 8 512 94 10 756	Furneaux Central Furneaux South  North Huon Furneaux Flinders Island Central King Island  North central Flinders Island North central Flinders Island North east Furneaux East North east Furneaux North central	Bird island Alpine vegetation Bird island In Southwest Conservation Area To be added to a National Parl Estuarine, wetland Bird island Cape Barren Goose refuge Sclerophyll forest To be added to a Nature Re serve To be added to a Scenic Reserve Wetland, marsh Estuarine, marsh Bird island Brackish lagoon To be added to a National Parl Bird island Nothofagus forest
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#### LAND TENURE

# National Parks, State Reserves, etc. at 30 June 1984—continued

Name	Area (ha)	Location	Description		
	Muttonbir	d Reserves			
Babel Island Great Dog Island Hunter Island Little Green Island Outer and Inner Sister Islands	. 377 . 7 365 . 89	Furneaux Furneaux North west Furneaux Furneaux	Muttonbird hunting ground Muttonbird hunting ground Muttonbird hunting ground Muttonbird hunting ground Muttonbird hunting ground		
Wildlife Sanctuaries Under Joint Management With Other Authorities					
Badger Corner Beaufront Ben Lomond Burnie Fernglade Cape Contrariety Cape Direction Cape Portland Carr Villa Chauncy Vale Deal Island Deloraine Derwent River Four Mile Creek Fulton Park Glenorchy Water Reserve Goose Island Grimes Lagoon Goulds Lagoon Henry Somerset Orchid Kingston Golf Course Lake Dulverton Launceston Golf Course Mount Pleasant Paterson Island Patriarchs Pipers River Punchbowl Reekara Sandspit River Scottsdale, NE Park Sea Elephant River Southport Lagoon Southwest St Clair Lagoon The Lea Tooms Lake Wayatmah Lagoon	333 157 2665 44 4 5 663 62 357 1623 2 1568 607 34 712 97 173 8 39 61 217 61 66 16 101 162 24 2428 550 1186 3556 777 151 255 150 22663	Flinders Island Midlands North east North west South east South east Launceston East central Bass Strait North central South east North west Furneaux Midlands Hobart, west Furneaux Midlands Hobart, north Kingston Oatlands Launceston Launceston North central Flinders North east Launceston King Island East coast North east King Island South east South west South central South East central South East central	Foreshore and marine Deer, Forester kangaroo Wet sclerophyll forest Fern gully Muttonbird rookery Muttonbird rookery Waterfowl habitat Modified sclerophyll forest Island, grassland Riverine, waterfowl Estuarine, river, marsh Estuarine, flats Scout camp Dry sclerophyll forest Seabirds Freshwater lagoon, birds Orchid flora Dry sclerophyll forest Freshwater lagoon, birds Orchid flora Dry sclerophyll forest Freshwater lagoon, birds Dry sclerophyll forest Freshwater lagoon, birds Dry sclerophyll forest Heathland teatree Estuarine, marsh, birds Modified sclerophyll forest Heathland tea tree Estuarine, marsh, birds Modified wet sclerophyll forest Coastal lagoon Scenic wilderness Lagoon Scout camp Lake, dry sclerophyll forest Storage reservoir		

NOTE: Sclerophyll forest: The term sclerophyll means 'hard leaved'. Most Australian forests are dominated by trees (usually eucalypts) and shrubs which have thick, hard leaves—an adaption to the dry Australian environment.

# LANDS DEPARTMENT

(This article was provided by Anne Ricketts, Project and Training Officer, Tasmanian Lands Department, Hobart)

The Lands Department's historic role embraced a whole range of real estate practices including the purchase and disposal of Government property, survey, mapping, valuation and active land management and conservation. These historic roles are still carried out today to a more intensified extent.

The Lands Department is not only seen in the modern day as a developer of the Crown Estate but also as a manager of that Estate. It is the provider of professional services related to property administration to both State and Local Governments and as such is the custodian and manager of all Crown land and buildings not under the specific control of other line departments.

A major change in its recent role has occurred because of its entrepreneurial and project management activities located on Crown Reserves. The basis of this article will focus on these developments as the contribution by the Lands Department in these areas will be invaluable for Tasmania's future development.

Along with this expanded role the Department will continue to provide essential professional services in the areas of valuation, survey, mapping and real estate required by government agencies and the private sector.

# Organisation

At the time of writing the Lands Department was functionally organised into six divisions under the control of the Director-General of Lands. The divisions include Administration, Real Estate, Land Management, Valuation, Mapping and Survey. In addition the Public Offices Secretariat is administered by the Department. The Department is run under a corporate management style similar to many large, private organisations. The total staff of the Department, at June 1984, was 352 with District Officers or representatives located at Smithton, Burnie, Devonport, Launceston, Bridport and Liawenee.

In Tasmania's development most land with an important dominant resource value has been alienated to private ownership or has been dedicated for special management such as a State Forest or State Reserve. In the more settled regions of the State, much of the remaining Crown land has not been alienated because it is 'marginal land' in terms of productive potential. However most is valuable as a multiple use resource and provides an important bank of resources for many uses such as water supply, rough grazing and agistment, supply of sand, gravel and minerals and for public amenities and recreation.

Management of multiple resources within the land is reflected in the policy of the Department to maintain, manage and conserve a permanent Crown Land Estate to satisfy a wide range of present and future community needs. Perhaps the most publicly visible Crown Land Reserves are those specifically set aside for public recreation and enjoyment. Development for the public is done within the wider concept of a permanent Crown Land Estate managed in accordance with multiple use principles which subsequently serve to protect many wider public interests while providing and protecting future options for economic use and development.

Recognising the importance of National Parks to protect prime areas for the purpose of nature and wilderness conservation at one end of the recreation spectrum, the Lands Department provides Lands Recreation Areas to accommodate the large majority of people through a much wider range of recreation opportunities. This philosophy is vital to the State's growing tourist industry and consequent employment and development prospects. To this end, within the system of Lands Recreation Areas, State Recreation Areas have been developed to primarily provide for many forms of active recreation often not acceptable in National Parks. In Protected Areas on the other hand, while recreation and conservation values are recognised, they may not be paramount and management policies aim to permit reasonable exploitative uses and/or to protect economic options for the future.

The Lands Department administers approximately 70 reserves which involve an area of over 216 000 hectares. Each reserve has a different function and, as mentioned, Protected Areas are large areas managed to allow controlled use of resources, as well as protecting the natural environment and encouraging community recreation.

Crown Reserves are special reserves which, where compatible, are managed to protect natural and recreational values.

State Recreation Areas are areas managed to provide for community recreation with some controlled commercial use of resources whilst protecting the natural environment.

Coastal River and Lakeside Reserves are managed to protect the natural environment as well as providing for public access to rivers, coasts and lakes.

#### Crown Reserves

#### Mount Nelson Signal Station and Truganini Reserve

The Department has built a walking track through this beautiful reserve which connects the Mt Nelson Signal Station with the Channel Highway at Taroona. Panoramic views of Hobart, the Derwent Estuary, the D'Entrecasteaux Channel and far up the East Coast can be viewed from the Signal Station.

# East Coast of Tasmania

There are a variety of scenic day use areas all along the East Coast of Tasmania which provide access to popular beaches. At Mayfield the Department allows range type bush camping.

#### St Helens Area

This area is composed of the St Helens Point State Recreation Area, Humbug Point State Recreation Area and the Bay of Fires Coastal Reserve. These are all extremely popular holiday resorts and feature attractive bushland with access to the beaches, fishing from rocky headlands and boating in the bay.

#### W.A.G. Walker Rhododendron Park

The Walker family passed this area over to the Lands Department to manage. It is open to the public in spring and autumn when the plants are at their most attractive.

### Trevallyn State Recreation Area

The Department has created a wonderful inland aquatic playground at the Trevallyn Reserve. The construction of a beach on the shores of Lake Trevallyn has made this a popular spot for the people of Launceston. It is located in the hills west of Launceston and is one of Australia's unique urban parklands. The 450 hectare Reserve offers the natural charm of lake, river and open eucalypt forest — environments to be enjoyed for recreation and leisure by the people of and visitors to the Launceston region. Facilities are available for horse riding and archery and foot tracks are provided for bush walking enthusiasts.

The Department has published a brochure on the area which follows a theme established by various other Camping on Crown Land brochures which provide concise descriptions of the natural features and recreational facilities in the Reserve. Other features of the brochure are the detailed sketches of flora and fauna seen at Trevallyn. Another concept used in the brochure is the use of a three dimensional map taken from aerial photographs. This gives the reader a more accurate topographical description of the Reserve.

#### Central Plateau Protected Area

This sub-alpine environment is a favourite retreat for the fisherman. Included in this Protected Area is Dago Point, adjacent to Lake Sorell in the Central Highlands, which has been set aside primarily for the angling fraternity. It has long-stay caravan sites and a boat ramp. The Department has also allowed the construction of clubhouses for various fishing groups.

#### Arthur-Pieman Protected Area

This magnificent semi-wilderness area with vast sweeps of coastland with heath behind the dunes is managed by a Crown Land Warden based at Smithton who also regulates the agistment runs south of Marrawah.

#### Seven Mile Beach Protected Area

A very popular multi-use area for swimming, boating, horse riding and trail bike riding. Here a village green has been built which provides an area for sports on an informal basis such as cricket, football or just games with the children. There is a variety of day use facilities such as toilets, barbecues and picnic tables provided by the Department.

# **International Sporting Facilities**

Perhaps one of the most significant developments spearheaded by the Lands Department has been its construction, management and implementation of plans for a variety of world standard international sporting complexes.

# Lake Barrington Rowing Course

One development in this category is the Lake Barrington Rowing Course. This magnificent example of an international standard sporting facility was officially opened on 3 March 1984. Completed at a cost of \$1.82 million the National Rowing Championships and Kings Cup were held here in April 1984 and the course received overwhelming praise from the national and international rowing fraternity.

Lake Barrington has been recognised as being one of the fairest rowing courses in the world mainly due to its location. It is settled deep in steep banking slopes and is protected from the weather. It also has the unique feature which permits rowers to warm up behind the start for five kilometres and then to cool down behind the course. Such a bonus does not exist on any other course in the world.

Not only is Lake Barrington the setting for a magnificent rowing course, it also acts as a multi-purpose aquatic centre and can be used for sprint canoeing and water ski competitions. Even during the off-season the site receives up to 1 000 visitors per week.

With this course, Tasmania will eventually become the centre for rowing in Australia there is no other rowing course in this country which satisfies the International governing body for rowing. The Federation Internationale de Societies d'Auiron has decided to hold the 1990 World Rowing Championships at Lake Barrington.

# Tasmanian International Velodrome

Perhaps the most sensational development for international sport in this State is the construction of the Tasmanian International Velodrome at the Lands Department's Kate Reed State Recreation Area in Launceston. It is the first enclosed velodrome in the southern hemisphere.

The complex, a multi-million dollar construction, comprises a world standard cycling track, and an international standard sports arena. Provision has also been made for the staging of musical performances within this complex.

The Velodrome also lends itself as a high class exhibition venue. In fact organisation is well under way for the biggest exhibition ever to be held in Tasmania called 'Tassie Expo '85'. This is being organised by the Kings Meadows Jaycees and the Examiner Newspaper. Another major event held at the Velodrome was the Australian Cycling Championships in 1985.

The complex has a seating capacity in the permanent grandstand for 1 750 people and provision for 3 200 seats on the central arena. In total it will have the capacity to accommodate 5 000-6 000 people depending on the type of event.

The site is an ideal location for the aforementioned recreation activities. Positioned between the new junction of the Midlands and Bass Highways in Launceston, it is an appropriate distance from the residential areas; it is in a bushland setting and the topography of the area provides for natural sound barriers and buffer zones. It also interfaces with the rural environment.

A five person management authority has been set up to manage the Velodrome.

# Kingborough Sports Complex

At Kingston, south of Hobart, the Kingborough Sports Complex already has very impressive facilities and with the addition of an International Baseball Complex it will also contribute significantly to the influx of visitors to the State. Baseball is a truly international sport and is experiencing rapid growth in Australia.

The complex, designed to meet world-wide standards, has two pitches and excellent player and spectator facilities. It is here that the 1985 Australian Baseball Championships were held.

# Divisions of the Lands Department

# Mapping and Survey Division

A major function of the Lands Department and one that has made it well known throughout Australia and throughout many other countries is map making. The major responsibility of the Mapping Division of the Department is to provide an efficient mapping service for the State of Tasmania.

Specifically it has the responsibility to carry out a continuing program of vertical aerial photography, maintain an up-to-date library of aerial photography and remote sensing data, and to prepare and update topographical and cadastral base mapping data of the State and publish it at appropriate standard scales.

As resources permit, the Division also produces thematic maps and provides a consulting and production service to meet the needs of other departments and instrumentalities.

The Department also produces and markets a large range of maps which are a valuable aid to those who wish to explore the vast wealth of Tasmania's scenic beauty. Special maps are often needed for tourism purposes. The Division is in fact responsible for preparing the general tourist map of Tasmania.

The Tasmap range includes the popular 1:100 000 topographic series which covers the whole State and is a valuable aid for bush walkers, emergency services, recreational enthusiasts and the more serious traveller.

A relatively new series of 1:25 000 topographic/cadastral maps are proving to be successful with professional and private groups and individuals involved with all aspects of land ownership and associated transactions. The 1:25 000 maps show municipal boundaries, vegetation, mean temperature and rainfall for an area, ownership boundaries and internal subdivisions. The Department also produces an excellent range of regional, national park and special purpose maps.

Aerial photography of the State is carried out by the Mapping Division. Up-to-date vertical aerial photographs are essential to map making and valuation procedures and are of major importance to mining, forestry and agricultural industries and planning authorities.

Aerial photography of Tasmania is only possible during the summer months. Inclement weather may cause considerable delays in supplying photographs for a particular project. To be able to meet the needs of users and overcome the delays due to bad weather it is Departmental policy to carry out a cyclic program, taking photographs of urban and developing areas every two to three years and of rural areas every five to seven years.

The demand from the public for aerial photos has had a phenomenal increase in the past few years. Everyone from the farmer to the man in the street seems to want a bird's eye view of their property. This demand does not include the huge purchases made by private organisations and Commonwealth, Local and State Government instrumentalities.

The Lands Department is also responsible for establishing and directing policy on the co-ordination of Government survey activities involving geodetic, engineering and other surveys which provide horizontal and vertical control for mapping and co-ordination of surveys. The Survey Division also provides survey and drafting services to the Lands Department and various other government authorities. Numerous other functions associated with the wider aspects of surveying are implemented by the Division.

Valuation Division

Another major role performed by the Lands Department is the provision of cyclic valuation lists at five yearly intervals and supplementary valuation lists of all land in the State. These valuations are used for rating purposes by the four cities and Tasmania's 45 municipalities and also for land tax purposes by State Treasury.

The field staff of the Valuation Division are deployed on a regional basis with offices at Hobart, Launceston, Burnie and Devonport.

The Tasmanian valuation system has been recognised by the Commonwealth Grants Commission as having the widest area of statutory responsibilities of all States in Australia. This system has established a uniformity of valuation procedures for rating purposes in that all rating authorities are required under the provisions of the *Local Government Act* to use the Valuer-General's assessments for this purpose.

The valuation roll for the State at present totals approximately 193 000 entries and provides continually updated information on ownership, land area, structural improvements and sales information, together with the statutory assessments of land value, capital value and assessed annual value.

A major policy initiative of the Department in relation to valuation has been the introduction of the 'VALTAX' computer system whereby the valuation rolls have been computerised to meet the needs of the Valuation Division of the Lands Department and the Taxation Branch of Treasury. The VALTAX system was the first step in achieving the objective of a one-stop-shop for all information relating to land.

The Lands Department, in conjunction with the Land Information Systems Committee, has commenced the storage of property data on the State computer. This has subsequently created a valuable Land Information Data Base for use throughout the Government. Approval has been given for the recording of all Certificate of Title numbers against each property in this Data Base.

#### Conclusion

As one can see the Lands Department is active in a number of areas all of which help to enhance Tasmania's image to the visitor. From map making to surveying, managing coastal reserves to developing outstanding international sporting facilities, the Department continues to play a major role in Tasmania's future. Its growing role of project management of specific developments on Crown Land will be maintained as it has arisen from its pre-eminent roll in overseeing the planning and development of projects such as the Lake Barrington International Rowing Course and the Launceston Velodrome.

#### CLIMATE OF TASMANIA

(The following section was prepared by the Bureau of Meteorology)

# Introduction

Since Tasmania lies between 40° and 43½° south of the Equator and is an island with no point more than 115 kilometres from the sea, its climate is classified as temperate maritime. On the coast the daily temperature range averages about 8° Celsius, rising to about 12° Celsius further inland, indicating a slight continental effect.

The combination of mountainous terrain in the western half of the State and prevailing westerly winds produce a marked west-cast variation of climate, and especially of rainfall.

Summers are mild and characterised by greatly lengthened days. The sun reaches a maximum elevation of 70-73° in mid-summer, giving 15 hours of daylight in the north and 15½ hours in the south. In mid-winter, the sun's elevation does not exceed 20-23°, and the shortest day consists of 9¼ hours of daylight in the north, falling to slightly under nine hours in the south.

In winter, westerly winds reach their greatest strength and persistence, causing a distinct maximum in rainfall distribution in the west and north-west. In the east and south-east, rainfall is more evenly distributed throughout the year. In comparision with those areas of Europe and North America which are at similar latitudes, Tasmania enjoys a very temperate climate. This is due to the stabilising effect of surrounding oceans whose temperatures change only 3-5° throughout the year. The higher proportion of ocean to land area confers a similar benefit on the Southern Hemisphere as a whole.

#### Winds

The prevailing winds over most of the Island are north-west to south-west, with greatest strength and persistence during late winter. Speed and direction vary with the eastward passage of high and low pressure systems. In the summer months, when westerlies are weak, afternoon sea-breezes become the predominant wind in coastal areas. Occasional periods of north-east to south-east winds occur.

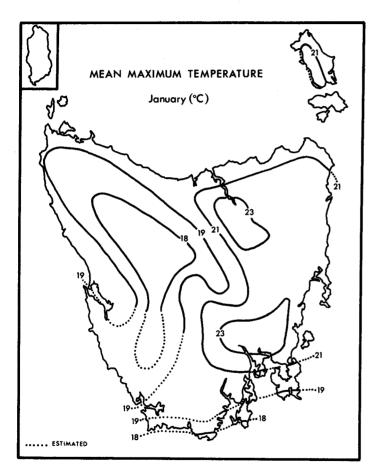
The highest average wind speeds are associated with extensive deep depressions over ocean areas south of Tasmania.

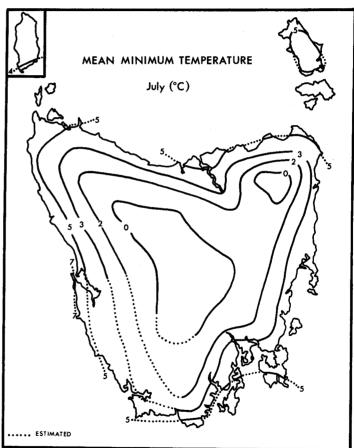
#### **Temperature**

Except under very stable conditions temperature decreases with height at the rate of about 1°C per 100 metres. Hence, in a mountainous island like Tasmania the isotherms (lines of equal temperature drawn on a map) will be much influenced by topography. Greater cloud cover over the western half, a result of the persistent westerlies, further decreases day-time temperatures in the west, while the Fohn effect warms and dries the westerly airstreams as they descend to the Midlands, the East Coast and south-east districts.

The incidence of frosts is affected markedly by topography, the valleys acting as natural channels for the drainage of cold air at night. Widespread severe frosts are experienced in winter on the Central Plateau and in upland valleys. Inland centres below 300 metres are virtually frost-free only in summer, while the North Coast, the east and south-east have few frosts after early October. Above 300 metres there is no frost-free month.

Tasmania only occasionally experiences the extremes of temperature common to the other States. High temperatures recorded in the east and south-east of Tasmania generally occur on the last day of a warm spell during which a dry air mass of mainland origin is advected over the State from a direction between north and north-west. Some cooling in the lower air layers over the waters of Bass Strait prevents the northern coast from reaching the higher temperatures that are experienced in the south under these conditions. The highest temperatures ever recorded in Tasmania are 40.8°C at Bushy Park in December 1945 and at Hobart in January 1976. The lowest temperature recorded was -13.0°C at Shannon, Butlers George and Tarraleah in June 1983.





The recorded extremes of temperature for Hobart are  $40.8^{\circ}$ C in January 1976 and  $-2.8^{\circ}$ C in June 1972 and July 1981. Readings above  $38^{\circ}$ C or below  $-1^{\circ}$ C are rare, the mean maximum temperature in summer being  $21^{\circ}$ C and the mean minimum in winter,  $4.8^{\circ}$ C.

The mean maximum temperature for January and the mean minimum temperature for July over Tasmania are shown in the two accompanying maps. The mean maximum is the average of daily maxima for January; the mean minimum the average of daily minima for July.

#### Rainfall

As Tasmania's position is on the northern edge of the 'Roaring Forties' (a westerly air-stream), its exposure to this stream and the mountainous nature of the terrain are the controlling influences on the amount, distribution and reliability of the State's rainfall.

In the west, average annual rainfall ranges from about 1 500 mm on the coast to 3 500 mm at Lake Margaret; in the north-east, from 500 mm on the coast to 1 300 on the highlands; while rainfall in the north-west ranges from 1000 mm near the coast to 1 600 mm in the higher inland areas.

Extreme three to five-day rainfalls occur most often on the West Coast in late June when the westerlies are increasing in strength and persistence and the sea temperature is well above the land temperature. In the north, short periods of extreme precipitation occur when wind flow is sustained for up to two days from the north-east, usually from late autumn to spring. The high moisture content of such streams from over the relatively warm waters of the Tasman Sea results in heavier, if less prolonged, rainfall than is produced in the westerly streams.

There is a strong gradation in rainfall from west to east, because of topography, with a distinct rain shadow east of the Central Plateau. Parts of the Midlands average less than 500 mm per year. Totals in the east and south-east are higher (over 800 mm on exposed slopes).

Rainfall is least reliable in the east, south-east, Midlands and Derwent Valley. Highest rainfall in these areas tends to occur in autumn and spring, under the influence of small cyclonic depressions off the East Coast.

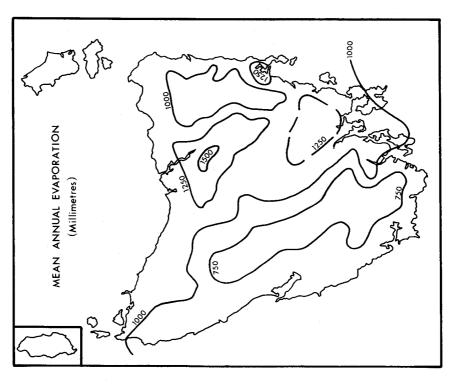
Effective rainfall is the amount necessary to compensate for evaporation, begin germination and maintain plant growth above wilting point. Average rainfall is sufficient for this purpose from May to September. From October to January the chance of receiving effective rainfall decreases, except in the west and north-west, where the probability is usually better than 50 per cent. In the Midlands, the Derwent Valley, the south-east and east, and in the northern inland, the chance of receiving at least effective rainfall during the summer months is very small.

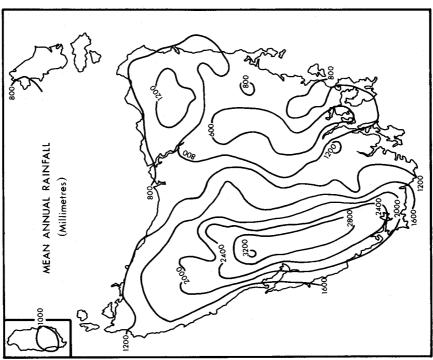
The average annual rainfall distribution over Tasmania is shown on an accompanying map.

#### Snow and Hail

Snow and hail can be experienced over the highlands at any time of the year. Heaviest snowfalls occur, as a rule, in late winter and spring, and less frequently in June and July. Extensive snow below 150 metres occurs, on the average, less than once every two years, associated with an unusually vigorous outbreak of cold air from Antarctic regions. There is no permanent snowline, but patches of snow often remain on the highest peaks until December.

Hail is most likely in spring, though possible in any month. Hail storms are a big risk to fruit crops in the Huon Valley and on the Tasman Peninsula, and sometimes cause extensive damage.





#### **Thunderstorms**

These are most common in the west and about the North Coast and are usually associated with the lifting of warm moist air by a cold front. Thunderstorms occur mainly in the summer months. Hobart and Launceston average five to seven storms per year, and the north and north-west, 10 to 15. The Central Plateau and north-eastern highlands report, on average, about five storms per year, while the Midlands, as gauged by Oatlands, has less than three.

#### Floods

In Tasmania the river system most affected by flooding is the South Esk. The Esk catchment includes most of the north-eastern highlands, where annual rainfall averages about 1 300 mm, and part of the Western Tiers where run-off can be rapid. As many rivers in the South Esk system flow through flat country, flooding can be widespread and disruptive.

Flooding of the Derwent River system can be extensive but is less frequent than in the South Esk. The most severe flood on record in the Derwent occurred in April 1960 with the peak discharge flow recorded as 3 400 cumecs (cubic metres per second) at Macquarie Plains. However, it is most unlikely that flooding of this severity will again occur on the Derwent due to the completion of four dams across the River since 1960 by the Hydro-Electric Commission.

Flooding of rivers in the west and south of the State can be of greater frequency than in the Derwent and Esk systems but because of mountainous terrain and lack of population these pass mostly unnoticed. Similarly, the short, fast-flowing rivers of the East Coast flood and fall rapidly, but can cause damage and disruption to road systems.

On two occasions in 1974 torrential rain caused severe flooding in the north-east of Tasmania. There was widespread damage to property, serious damage to road systems and high stock losses in the floods which occurred less than two months apart.

In the north and north-west of Tasmania many rivers have their catchments along the northern edge of the Central Plateau and can flood quickly.

#### Humidity

The mean relative humidity at both 9.00 a.m. and 3.00 p.m. exceeds 50 per cent at all stations in all months of the year. Relative humidity is generally higher in the morning than in the afternoon, and higher in coastal regions than inland. Days of high temperature combined with uncomfortably high humidity are rare. In the east, south-east, and Fingal Valley, warm dry winds from a west or north-west direction may occasionally have a relative humidity as low as 10 per cent.

#### **Droughts and Bushfires**

Although Tasmania has the highest average rainfall of any State in Australia, drought conditions are not unknown. Unlike the remainder of Australia, droughts in this State tend to be highly localised and of reasonably short duration. The most severe effects are usually felt over a period of only a few months, but serious rainfall deficiencies can extend over a period of two or three years. The most severe long term droughts occurred during the periods 1888-1889, 1897-1898, 1918-1920, 1933-1934, 1945-1946, 1949-1952, 1967-1969, 1972-1973 and 1979-1982.

Serious bushfires occurred in 1898, 1915, 1946, 1951, 1967 and 1981. The bushfires of 7 February 1967 were the most severe in the State's history causing 62 deaths and damage to property estimated to be in excess of \$25m. The worst fires on the West Coast occurred during February 1981 with property damage around Zeehan estimated to be near \$5m.

#### **Evaporation**

Evaporation depends mainly on wind strength, the moisture deficit of the airstream and on sunshine. The World Meteorological Organisation has asked for standardisation of measurement of evaporation by use of the Class 'A' pan (a galvanised pan, 1.22 metres in diameter and 25.4 centimetres deep) which gives higher figures for evaporation than those obtained from the containers previously used in Australia (Class 'A' pan figures should be multiplied by a factor of about 0.80 to obtain the average potential evapotranspiration likely for Tasmanian crops). A previous map gives details for mean annual evaporation.

At Launceston Airport the annual evaporation is just under 1 500 mm due largely to the prevalence of winds coming from the Western Tiers, which become warmer and drier in their descent to the lower Midlands and Tamar areas, thus increasing evaporation. Monthly evaporation at Launceston Airport has ranged as high as 270 mm in summer but drops to between 25 and 40 mm in winter. This area of high evaporation extends southward to the lower Derwent and Huon areas. The lowest evaporation rate occurs in the Central Plateau, West Coast Ranges and south-west areas where annual evaporation may fall to less than 750 mm. This is due to the high moisture content of the prevailing westerlies and the high average cloud cover. In these areas the monthly evaporation rate may range from about 125 mm in January to only 12 mm in June and July.

Another area of low evaporation (below 1 000 mm a year) is located in the North-East Highlands.

#### Sunshine

The average number of hours of sunshine a year ranges from about 2 500 hours in the northern Midlands to less than 1 750 hours on the West Coast and western highlands, this area having the least amount of sunshine in Australia. Hobart averages 2 100 hours per year and Launceston around 2 400.

In January, daily averages of sunshine range from nine hours per day between the Midlands and Launceston to six hours per day on the West and South Coasts. In mid-winter, average daily sunshine is down to a maximum of three hours on the East Coast and to considerably less on the West Coast and highlands.

#### The Climate of Hobart

Temperatures: Mean maximum temperature exceed  $21^{\circ}$ C in January and February. On average there are two or three days per year with maximum temperatures greater than  $32^{\circ}$ C. Only once, in February 1968, have three successive days over  $32^{\circ}$ C been recorded in Hobart. Minimum temperatures below  $-1^{\circ}$ C are rare.

Rainfall: There is a strong gradient of rainfall to the immediate west of Hobart caused by the bulk of Mt Wellington. On the south-eastern slopes of the mountain the annual rainfall reaches 1 400 mm (at The Springs and The Gap) while at Fern Tree the annual average is 1 140 mm. The rainfall decreases to about 600 mm in the city area, the annual average being 626 mm at the Regional Office of the Bureau of Meteorology. Some eastern shore suburbs receive as little as 500mm of rain per annum.

Monthly totals are fairly uniform. The wettest 12 months on record at the Bureau's Hobart Office yielded 1 104 mm (to December 1916) and the driest, 320 mm (to November 1943).

Relative Humidity: Highest humidity is at the time of lowest temperature, in the early morning during winter. As temperatures rise to 3.00 p.m., humidity decreases by 15-20 per cent. The seasonal variation is not great, although the average humidity during the winter months is 70 to 75 per cent and during the summer months 58 per cent. Periods of high humidity combined with high temperatures are rare.

Fog: Fogs occur in the city about four times per year, in the cooler months, but are more frequent over and near the Derwent River, down which they are often carried on a light north-west wind. Fog frequency is far less than that for either Launceston or Melbourne.

Wind: The main wind direction is north-west, induced by the orientation of the Derwent Valley. Next in importance is the sea-breeze (from south or south-east) during summer months.

The strongest wind gust experienced in Hobart was 150 km/h recorded during a storm in September 1965.

Snow and Hail: Snow below 300 metres occurs, on the average, less than once per year. Falls lying in the centre of the city, almost at sea level, have occasionally been recorded. Snow generally lies on Mt Wellington during winter and early spring months, but it is rare between November and March. Hail occurs about four times a year, mainly between September and November.

Frost: The average annual frequency of days of frost is 28, mostly from June to August. None has been recorded in January. Cold air drainage is found in the hilly suburbs and frosts are common on the valley floors.

Sunshine and Cloud: No marked seasonal variation of cloud amount occurs but a strong dependence on time of day is evident. During April to September cloud cover is greater in the afternoon and from October to March it is greater in the morning.

A clear-cut seasonal variation in monthly average hours of sunshine also occurs with amounts varying from 231 hours in January to 111 hours in June.

Climatic Data: The next table gives the main climatic data for Hobart and a comparison between the 1983 and long-term average rainfall conditions:

			iobait Cimat	ic Data				
		Shade te	mperature			Rainfall		
Month	Mean maxima (a)	Mean minima (a)	Extrer Maximum	nes (b) Minimum	Mean daily hours of sunshine (a)	1983	Long- term average	
	C	, C	°C	°C	hours	mm	mm	
January	21.4	11.9	40.8	4.5	7.9	19.0	48	
February	21.5	12.1	40.2	3.4	7.1	7.6	41	
March	20.0	10.9	37.3	1.8	6.3	109.4	48	
April	17.1	9.0	30.6	0.6	5.1	53.4	53	
May	14.2	7.0	25.5	1.6	4.2	41.8	48	
June	11.7	5.2	20.6	2.8	3.9	40.8	57	
July	11.5	4.5	21.0	2.8	4.3	35.6	53	
August	12.9	5.2	24.5	- 1.8	5.0	48.8	51	
September	14.9	6.4	28.2	-0.6	5.9	127.8	52	
October	16.8	7.8	33.4	0.0	6.3	56.2	62	
November	18.5	9.3	36.8	1.7	7.0	58.4	56	
December	20.1	10.9	40.7	3.3	7.3	17.0	55	
Total for year			.,			615.8	624	

**Hobart Climatic Data** 

<sup>(</sup>a) Long-term average.

the Specific extreme temperatures since records kept.

The next table compares Hobart climatic data with that of other Australian cities:

	Sydney	Melbourne	Brisbane	Perth	Adelaide	Hobart	Darwin	Canberra
Temperature (°C)—								
Mean daily max	21.4	19.9	25.4	23.2	22.4	16.7	32.3	19.3
Mean daily min	13.6	9.9	15.5	13.1	11.8	8.3	23.2	6.2
Extreme max	45.3	45.6	43.2	44.7	47.6	40.8	40.5	42.2
Extreme min	2.1	-2.8	2.3	1.2	0.0	-2.8	10.4	-10.0
Mean daily hours of sunshine	6.7	5.7	7.5	7.9	6.9	5.9	8.5	7.2
Mean annual								
(mm)	1 215	661	1 157	879	531	624	1 536	639
Mean annual days of rain	148	143	123	120	120	160	97	110
Wind-								
Average (km/h)	11.6	12.3	10.8	15.6	12.5	11.7	9.2	5.8

#### The Climate of Launceston

Being over 50 km from the coast, Launceston exhibits a slight continental effect — greater seasonal and daily variation of temperature and lower rainfall as compared with stations on the coast.

Temperature: Average maximum temperature exceeds  $24^{\circ}C$  in January and February,  $21^{\circ}C$  in December and March, and  $12^{\circ}C$  in June and July. Average minimum is about  $11^{\circ}C$  in summer, falling below  $4^{\circ}C$  in winter. Freezing temperatures are common during winter mornings, the lowest recorded being  $-6^{\circ}C$ . Up to 50 frost days are to be expected in a year, mostly from May to August. Light frosts may occur in summer.

Rainfall: The annual average is 720 mm. The wettest month is July (84 mm) while February and March, the driest months, each receive less than half this amount. The wettest month on record is August 1936 (254 mm). Annual totals range from 467 mm (1908) to 1057 mm (1946). Some severe thunderstorms are experienced. Snow does not settle in Launceston, but falls occur on surrounding hills.

Relative Humidity: Seasonal and daily variations are similar to those for Hobart but the daily readings are 5 to 10 per cent higher.

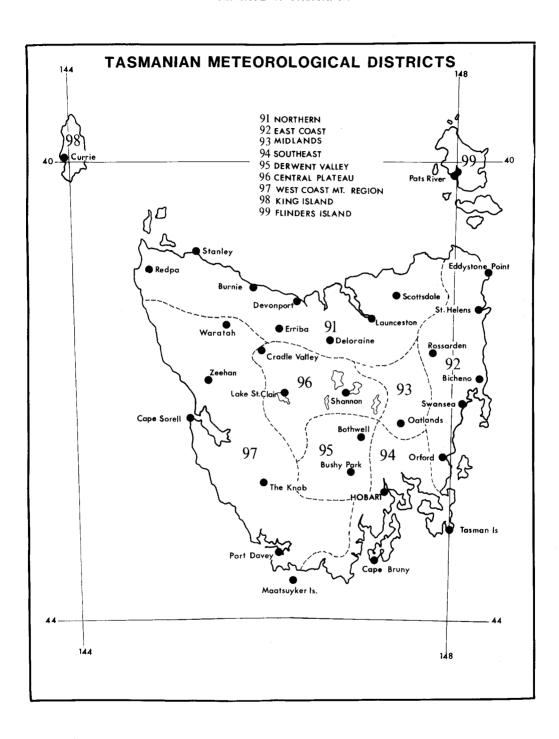
Fog: Occasions of high humidity, associated with moist north-east airstreams, are relatively frequent. Fog occurrence averages more than 30 days a year, mostly between May and August.

Winds: The NW-SE orientation of the Tamar Valley has a marked effect on surface winds, which conform mainly to these directions. The north-west wind is often reinforced in the afternoon by a sea-breeze from much the same direction. Strong winds are most common during the colder half of the year and severe squalls can occur in association with thunderstorms.

#### **Rainfall Statistics**

#### Meteorological Districts

Tasmania is divided into nine meteorological districts (not to be confused with statistical divisions) with fairly well-defined land use patterns appropriate to each. The following map shows Tasmania's meteorological districts:



#### Rainfall of Tasmania in Districts (Millimetres)

	Northern	King Island	Central	Plateau	Midlands	
Period	Crops, dairying, forestry	Grazing. dairying	Gra	ly sheep)		
1977	903	994	98	39 .	511	
1978	926	875	1 00	02	557	
1979	1 045	1 048	91	73	427	
980	944	772	98	39	412	
981	943	700	1.13	32	555	
982	699	561	84	40	377	
983	762	863	836		423	
District average (a)	996	940	987		547	
	Derwent Valley	South East	East Coast	West Coast	Flinders Island	
Period						
		growing, , forestry	Grazing, mining, forestry	Mining	Grazing	
977	612	709	710	2 456	615	
978	684	752	880	2 194	823	
979	692	603	601	2 522	703	
980	760	719	658	2 565	658	
981		796	768	2 362	764	
982	574	652	565	2 138	574	
983		876	747	2 026	688	
District average (a)		755	817	2 334	738	

(a) Long-term annual average based on 71 years of record.

# Annual Rainfall at Representative Stations, Tasmania (Millimetres)

		(Millimeti	<b>C</b> 3)			
Station	1979	1980	1981	1982	1983	Long-term average (a)
Avoca	453	474	562	395	484	558
Beaconsfield	1 003	960	927	703	711	956
Burnie (APPM)	1 143	963	980	743	n.a.	1 009
Campbell Town PO	443	397	547	387	412	548
Cressy Research	553	546	597	456	522	641
Franklin	683	914	874	616	n.a.	899
Hobart (Weather						*
Bureau)	390	464	548	398	598	632
Hobart (Airport)	353	385	483	336	472	525
Kettering	n.a.	n.a.	856	663	997	881
Launceston (Airport)	616	600	652	422	488	708
Lilydale	930	1 015	1 044	690	787	976
Lymington	661	713	767	578	856	790
Maydena	1 173	1 401	1 313	1 010	n.a.	1 233
New Norfolk	n.a.	453	559	372	357	407
Oatlands	443	434	572	355	473	564
Queenstown	2 645	2 800	2 422	2 302	2 164	2 526
Ringarooma	1 226	1 175	1 206	822	1 110	1 233
Savage River	2 108	2 001	1 824	1 561	n.a.	1 961
Smithton	1 342	1 094	1 124	817	919	1 106
St Helens	531	635	675	571	796	783
St Marys	816	838	1 038	654	1 129	1 029
Swansea	333	456	598	403	586	611
Triabunna	376	478	613	375	612	657
Ulverstone	1 033	911	923	763	769	966

<sup>(</sup>a) Number of years of record used to calculate the long-term average varies from station to station.

The next table gives details of a rainfall index for meteorological districts for recent years. The index shows the actual rainfall for a district expressed as a percentage of 'normal' rainfall (where 'normal' rainfall or the 'distinct average' is the mean for the 71-year period 1913-1983, i.e. the long-term average based on 71 years of record—details relating to annual rainfall and annual district average 'normal' rainfall are shown in an earlier table).

Rainfall Index by Districts, Tasmania (Index showing actual rainfall expressed as a percentage of 'normal' (a) rainfall)

	Meteorological district								
Period	Northern	King Island	Central Plateau	Midlands	Derwent Valley	South- east	East Coast	West Coast	
1977	90	105	100	92	90	93	86	105	
1978	92	92	101	100	100	99	106	94	
1979	104	110	99	77	102	80	73	108	
1980	94	81	115	75	111	95	80	110	
1981	94	74	114	100	106	105	94	101	
1982	69	59	85	68	84	86	68	91	
1983	76	91	87	80	90	107	94	92	

<sup>(</sup>a) 'Normal' rainfall is the mean for the 71-year period 1913-1983.

Seasonal Temperatures
Temperatures at Selected Stations, Tasmania, 1983
(°C)

,		Maximum temperatures		imum ratures	Mean temperatures		
Station	Mean for 1983 season (a)	Departure from normal (b)	Mean for 1983 season (c)	Departure from normal (b)	Mean for 1983 season	Departure from normal (b)	
		Summer	(December to	February)			
Hobart Launceston	21.4	+0.4	12.0	+0.7	16.7	+0.5	
Airport	22.9	+0.5	9.2	-0.4	16.1	+0.1	
Cape Bruny	18.3	+0.6	10.9	0.0	14.6	+0.3	
Devonport	20.3	+0.8	11.3	-0.2	15.8	+0.3	
New Norfolk	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	
Oatlands	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	
St Helens	22.7	+0.7	11.1	+0.2	16.9	+0.5	
Savage River	18.7	-0.2	8.7	-0.6	13.7	-0.4	
Queenstown	20.1	-0.8	8.3	+0.2	9.2	-0.3	
		Autu	mn (March to	May)			
HobartLaunceston	17.1	0.0	9.6	+0.9	13.3	+0.5	
Airport	17.4	+0.1	7.1	+0.4	12.2	+0.3	
Cape Bruny	15.2	-0.1	9.8	+0.3	12.5	+0.1	
Devonport	17.7	+0.1	8.8	+0.1	13.3	+0.1	
New Norfolk	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	
Oatlands	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	
St Helens	18.4	-0.1	8.7	+1.1	13.5	+0.6	
Savage River	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	
Queenstown	16.5	-0.4	5.9	+0.3	11.2	-0.1	

continued next page

# Temperatures at Selected Stations, Tasmania, 1983

	Maximum temperatures			imum eratures	Mean temperatures		
Station	Mean for 1983 season (a)	Departure from normal (b)	Mean for 1983 season (c)	Departure from normal (b)	Mean for 1983 season	Departure from normal (b)	
		Wint	er (June to Au	igust)			
Hobart	12.4	+0.4	5.1	+0.2	8.7	+0.3	
Airport	11.5	+0.2	2.3	-0.4	6.9	-0.1	
Cape Bruny	11.5	+0.2	6.5	+0.3	9.0	+0.3	
Devonport	12.7	0.0	4.2	-0.2	8.5	0.1	
New Norfolk	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	
Oatlands	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	
St Helens	14.2	+0.5	2.9	-0.3	8.5	+0.1	
Savage River	9.8	0.0	4.5	+0.6	7.1	+0.3	
Queenstown	12.0	-0.1	3.3	+0.7	7.7	+0.3	
		Spring (S	September to N	lovember)			
Hobart	16.2	-0.5	8.1	+0.5	12.1	0.0	
Airport	15.9	-0.4	5.6	0.0	10.7	-0.2	
Cape Bruny	14.0	-0.8	7.7	0.0	10.9	-0.4	
Devonport	15.8	-0.6	7.4	+0.2	11.6	-0.2	
New Norfolk	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	
Oatlands	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	
St Helens	17.4	-0.2	7.6	+0.9	12.5	-0.3	
Savage River	13.4	+0.2	n.a.	n.a.	n.a.	n.a.	
Queenstown	15.3	-0.4	5.0	-0.2	10.1	-0.3	

<sup>(</sup>a) Average of maximum daily temperatures for season.

The mean temperature for any locality can give a false impression, e.g. a mean temperature of 25°C based on a maximum of 50°C and a minimum of 0°C, all in the one day. A better way of examining a locality's climate is to take the maximum temperature each day and average these readings for each season; similarly, to take the minimum temperature each day and average these readings for each season. These mean maxima and mean minima then give an indication of the daily variation that may be expected. The above table shows the mean maximum and mean minimum temperatures for nine selected stations in summer, autumn, winter and spring.

#### Monthly Weather Review — 1984

#### January

Rainfall was below normal, the heaviest falls were recorded in all districts in mid January. Cool conditions prevailed, temperatures were below normal at almost every station. Galeforce winds were reported in many coastal areas and serious bushfires occurred in the west of the State.

#### February

Recorded temperatures were above average. Southern Tasmania experienced galeforce westerlies. Hobart recorded a gust of 100 km/hr. Rainfall totals were well below normal with the exception of the West Coast. Most district averages for the period December to February were the lowest for several decades and in the Northern and Derwent Valley districts the lowest on record.

<sup>(</sup>b) 'Normal' is the mean for the season averaged for the available years of record.

<sup>(</sup>c) Average of minimum daily temperatures for season.

#### March

Cool conditions were experienced throughout March. Rainfall was below average in the south-east but the rest of Tasmania had falls well above, in particular the north and north-east. These falls did much to alleviate the rainfall deficiences in the northern rainfall district. Snow fell on the Central Highlands above 1200 metres. Galeforce north westerlies caused damage along the north coast with wind gusts to 120 km/hr.

#### April

Widespread fogs occurred in many areas. Galeforce westerlies again hit the south of Tasmania. Temperatures were generally above normal.

#### Mar

Drought conditions prevailed in the south-east with severe rainfall deficiences. Maximum temperatures were generally above normal.

#### June

Frosts and fogs were prevalent throughout the State. Launceston experienced strong winds. Average monthly maximum temperatures were all above normal particularly along the east coast.

#### July

Minor flooding was reported in the north of the State. Rainfall in most areas was significantly below normal, only the east coast and south east had falls above average. Temperatures were generally close to average. Fogs and frosts occurred frequently.

#### August

Good falls of rain were recorded throughout the State with some flooding occurring, mainly in the north.

#### September

Rainfall continued to be well above average. Flooding occurred in many areas.

### October

Widespread snowfalls occurred down to 300 metres in many northern, central and southern districts in mid October. Temperature varied greatly during the month.

#### November

Most areas of the State experienced rainfall slightly below average except for the south east district which was well above due to heavy rainfall associated with thunderstorms. Maximum and minimum temperatures were generally above normal. Bushfires began to occur late in the month.

#### December

Unseasonal weather prevailed throughout December. Temperatures were markedly below normal with many areas experiencing departures several degrees below average. Rainfall was above average in all districts except the East Coast.

### **ENVIRONMENTAL CONTROL**

# Department of the Environment

Established in October 1972, the Department of the Environment is headed by a Director of Environmental Control who is responsible to the Minister for the Environment. Staff include a number of scientific experts who are responsible for particular aspects of pollution control and investigations—chemists, noise control investigators, air and water pollution officers and a waste management officer.

The Environment Protection Act 1973 gives the Director the general duties of: protecting the State's environment; ensuring the control or prevention of any act or emission which causes or may lead to pollution; and co-ordinating all necessary activities (government or private) to protect, restore or improve Tasmania's environment. In addition to the general duties the Act also confers the following more specific functions on the Director: consider means and initiate steps for the protection of the environment and for the prevention, control, abatement or mitigation of pollution; carry out investigations into environmental protection problems; obtain advice from experts in the field of environmental protection; review progress made in attaining objectives of the Act and publicise steps taken to protect the environment; advise on pollution standards and methods of sampling and testing for pollutants; and promote and co-ordinate planning projects for environmental protection.

Coverage of the Act: In the case of inconsistencies the Environment Protection Act 1973 prevails over the provisions of all other Acts with two exceptions: Oil Pollution Act 1961; and Public Health Act 1962. Since provisions of the Environment Protection Act would intrude into various sectors of existing legislation, the Statute Law Revision (Environment Protection) Act 1973 was introduced concurrently. The effect of this statute was to amend the Criminal Code, the Local Government Act 1962, the Mining Act 1929, the River Pollution Act 1881, the Hydro-Electric Commission Act 1944 and the Water Act 1957 to conform with the Environment Protection Act 1973.

Staff of the Department of the Environment continually visit most areas of Tasmania either monitoring or investigating complaints and pollution problems. Departmental officers have attended interstate seminars and conferences and visited other environment protection authorities for exchange of information. The Department participates in the work of the Australian Environment Council and has staff on a number of the Council's committees. In addition the Department is represented on the committee of the Keep Australia Beautiful Council. The Department is also represented on State Government inter-departmental committees which deal with environmental matters. Environmental seminars and lectures have been organised by the Department and special papers written dealing with the environment.

Oil Pollution Control: In 1978 an appointment was made to the position of State Oil Pollution Control Officer within the Department. The Tasmanian supplement to the National Plan to combat the pollution of the sea by oil has been updated and published. A State Oil Pollution Committee has also been formed to function under the National Plan with the following functions: to be a source of information and advice to the Government through the Marine Pollution Committee on matters of oil pollution; and to operate in combating any actual incident.

#### **Environment Protection Advisory Council**

The 1973 legislation also provided for the creation of the Environment Protection Advisory Council. Under the chairmanship of the Director of Environmental Control the Council has members drawn from government and private sectors and representing a number of diverse interests; e.g. the mining, secondary, rural and forestry industries, conservation groups, the Hydro-Electric Commission, trade unions, public health, etc. The council's task is to advise the Minister and make recommendations to the Government on environmental matters. The Council is empowered to appoint committees to investigate specific subjects. Committees appointed are—Noise Committee, Waste Committee, Air Committee and the Water Committee. As a result, regulations covering all the above pollution subjects have been promulgated.

Two sets of guidelines; relating to the rehabilitation of quarries and extractive pits, and the control of environmental noise from licensed hotels, taverns, restaurants and discotheques were produced and distributed during the year 1983-84.

# **Environmental Impact Studies**

The State Government has adopted a policy that requires public authorities to undertake environmental impact studies before proceeding with any development which may have a significant effect upon the State's environment. Responsibility for ensuring that such studies are performed rests with the decision-making authority. Co-ordination and evaluation of environmental impact studies are performed by the Director of Environmental Control.

Scope of an environmental impact study includes:

• a statement of the major objective of the proposed project:

- an analysis of the technological likelihood of achieving the objective;
- a statement of alternative practical plans for achieving the objective;
- an outline of existing characteristics of the environment prior to implementation of the development project;
- separate reports on alternative practical engineering plans for achieving the goal; and
- an assessment of the probable effect of the project upon the environment.

Such a study is to be used by the proposing body in determining environmental safeguards. For the Director of Environmental Control a study will provide a basis for review of the safeguards and for making recommendations for further protective measures.

#### **Further References**

DAVIES, J. L. (ed.) Atlas of Tasmania (Land and Survey Department, Hobart, 1965). Monthly Weather Review, Tasmania (published monthly by the Bureau of Meteorology, Hobart).

# CHAPTER 3

# GOVERNMENT AND ADMINISTRATION

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# Chapter 3

# **GOVERNMENT AND ADMINISTRATION**

#### Introduction

On 1 January 1901 the States of New South Wales, Victoria, Queensland, South Australia, Western Australia and Tasmania united under one constitution to form the Commonwealth of Australia. The Australian Capital Territory and the Northern Territory were transferred from New South Wales and South Australia respectively following a proclamation which vested them in the Commonwealth on and from 1 January 1911.

A federal system of government was adopted based on British-derived parliamentary institutions (the Westminster System) and American-derived federal arrangements. Under this system, government in Tasmania is exercised at three levels:

• Commonwealth Government, with authority based on a written constitution, and centred in Canberra:

• State Government, with residual powers, and centred in Hobart; and

• Local Government (the cities and municipalities), with authority derived from State acts, and operating, at the time of writing, in 49 sub-divisions of the State.

# Division of Power and Responsibilities

Under the Commonwealth of Australia Act 1900, the State of Tasmania surrendered part of its sovereignty and it was possible, at that point in time, to classify the totality of powers to be vested in the Commonwealth Government and the State as follows:

- exclusive powers to be exercised by the Commonwealth Government alone;
- concurrent powers to be exercised both by the Commonwealth Government and the State (subject to the supremacy of Commonwealth Government law in cases of inconsistency); and
- residual powers to be exercised by the State.

Since Federation there have been considerable changes in functions actually performed by the two governments due to constitutional amendments and to intergovernmental agreements affecting function.

#### Commonwealth Government Activities

The main fields of activity of the Commonwealth Government are: foreign affairs and diplomatic representation; maintenance of the armed forces; customs and excise; posts and telegraphs; control of broadcasting and television; control of civil aviation; repatriation of ex-servicemen; immigration; industrial arbitration for national industries; control of coinage and currency; overseas trade promotions; employment service; pensions; national health benefits; federal territories and overseas dependencies; census and statistics; meteorological service; federal courts and police; control of banking; collection of sales and income taxes; housing assistance and defence service homes; scientific and industrial research; management of state and national debt; and lighthouses and navigation.

For a list of Commonwealth Government Departments and their heads, see the section on Commonwealth Government later in this Chapter under the heading 'Commonwealth Government Departments and Instrumentalities in Tasmania'.

# State Government Activities

The State Government provides the greater number of community services including: transport, education, health, community welfare, housing, consumer affairs, forestry, fisheries, fire, police, emergency, agricultural and farming services. The State Government is also responsible for prisons, courts, libraries, probation, racing and gaming, and labour and industry. A list of State Government Departments and officials is included in the section on State Government under the heading 'State Government Departments and Officials'.

#### Local Government Activities

Local Government is mainly responsible for the maintenance of: parks, recreational and sporting facilities, roads and cemeteries, and provides town planning, sewerage, water, waste disposal and public health services.

#### COMMONWEALTH GOVERNMENT

Under Section 1 of the Australian Constitution the legislative power of the Commonwealth of Australia is vested in the Parliament of the Commonwealth, which consists of the Sovereign, the Senate (upper house) and the House of Representatives (lower house). Every State and Territory is represented in the Commonwealth Parliament by members elected from each State and Territory.

# The Sovereign

Australia has as its sovereign, Queen Elizabeth the Second. She was proclaimed Head of the Commonwealth on 7 February 1952 and her coronation took place at Westminster Abbey on 2 June 1953. The Queen is represented throughout the Commonwealth by the Governor-General.

#### The Governor-General

Under the Commonwealth Constitution, ultimate executive power is vested in the Crown and is exercised by the Governor-General as the direct representative of the Sovereign. Duties of the Governor-General include: representing the Queen on ceremonial occasions, the appointment of diplomatic or consular representatives, the setting of times for holding the sessions of Parliament; he has the power to prorogue parliament, dissolve the House of Representatives, cause writs to be issued for general elections of members of the House of Representatives and to assent, in the Queen's name, to proposed laws passed by both Houses of the Parliament, or to withhold such assent. Under the conventions of responsible government, the Governor-General's functions are exercised on the advice of the Ministers of State. Appointment to the Office is made by the Crown after consultation with the Prime Minister of the Commonwealth. The present Governor-General is His Excellency Sir Ninian Martin Stephen, PC, AK, GCMG, KBE, KStJ, who was sworn in on 29 July 1982.

#### Commonwealth Parliament

#### The Senate

The Senate was originally constituted with the aim of protecting the rights and interests of the States. Today, its main function has become generally that of a house of review.

Each State is represented by 12 Senators and, in addition, the Australian Capital Territory and the Northern Territory have been represented by two Senators each since the election of 13 December 1975. Each Senator's term is normally six years, as half the Senate seats come up for election every three years. In accordance with the Senate Representation of Territories Act, Senators from the Northern Territory and ACT are elected for the term of the House of Representatives. However, in the case of a double dissolution of both Houses, half the Senators are elected for a six-year term (the first six elected in each State) and half for a three-year term.

In Senate elections each State is an electorate. Electors are required to cast a vote for every candidate standing within the State in order of their preference or for a Party or group. Election of members is carried out in accordance with the principles of proportional representation by the single transferable vote (see 'Elections for the House of Assembly' later in this Chapter for a description of similar electoral principles).

If a vacancy occurs in the Senate, the appropriate State Government nominates a replacement, of the same political affiliation, who sits until the next general election (either for the House of Representatives or for the Senate), when an election is held to fill the vacancy. If a Senator fills such a vacancy through an election held at the same time as an election for the House of Representatives, his term will be the same as if the vacating member's term were to run its full course. If the vacant seat is contested at an ordinary Senate election, then seven, instead of the normal six candidates, will be elected in the State affected and the Senator last elected will fill the vacancy for a term shorter than the full six years.

On 1 December 1984 an election was held for the House of Representatives and half the Senate to fill the five vacancies of the Senators retiring in June 1985 and an additional two vacancies created by an amendment to the *Representation Act*. The following table lists the Senators for Tasmania as a result of the 1984 election, their party affiliation and year of retirement:

Tas	mania	n Ser	atore

Senator	Party affiliation	Year of retirement
Archer, B.R.	Liberal	1990
Aulich, T.	ALP	1990
Coates, J.	ALP	1990
Devlin, R.	ALP	1990
Grimes, Hon. D.J.	ALP	1988
Harradine, R.W.B.	Independent	1988
Rae, P.E.	Liberal	1988
Sanders, N.	Aust. Democrats	1988
Tate, M.C.	ALP	1988
Townley, M.	Liberal	1990
Walters, M.S.	Liberal	1988
Watson, J.O.W.	Liberal	1990

# The House of Representatives

The founders of the parliamentary system, when designing the House of Representatives, envisaged a legislative body representing the national interest. The party holding a majority of seats in the House of Representatives, therefore controlling the House, provides the government. Following a Federal election in March 1983, a Labor Government was formed under the leadership of Prime Minister Robert Hawke.

Representation in the House of Representatives is based upon the general principle of having, as nearly as practicable, electorates with equal number of electors. This is only possible if regular electoral redistributions are implemented. The following table indicates the state of the House of Representatives at the elections immediately following electoral redistribution and/or passage of legislation creating additional electorates:

Membership: House of Representatives

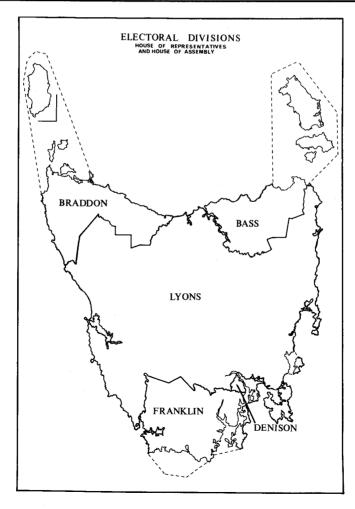
Year	NSW	Vic.	Qld	WA	SA	Tas.	NT	ACT	Total
1948	28	20	10	5	6	5	1	_	75
1949	47	33	18	8	10	5	1	1	123
1955	46	33	18	9	11	5	1	1	124
1969	45	34	18	9	12	. 5	1	1	125
1974	45	34	18	10	12	5	1	2	127
1977	43	33	19	10	11	5	1	2	124
1980	43	33	19	11	11	5	1	2	125
1984	51	39	24	13	13	5	1	2	148

Australia is currently divided into 148 single-member electorates and electors are required to cast a vote for every candidate standing within the electorate in order of their preference. Election of members is carried out in accordance with the principles of the absolute majority through use of the alternative vote (see 'Elections for the Legislative Council' for a description of similar electoral principles). If a vacancy occurs in the House of Representatives, it is filled by holding a by-election in the electorate concerned. Elections for the House of Representatives must be held at least every three years.

The following table lists the Tasmanian members of the House of Representatives elected on 1 December 1984 together with the party affiliation and electorate of each member:

Tasmanian Members of the House of Representatives

Member	Party affiliation	Electoral division	
Burr, M.A.	Liberal	Lyons	
Goodluck, B.J.	Liberal	Franklin	
Hodgman, Hon. W.M.	Liberal	Denison	
Miles, C.	Liberal	Braddon	
Smith, W.	Liberal	Bass	



Electorates: The five constituencies for the House of Representatives, as shown in the preceding map, were adopted in September 1984 following an electoral redistribution. All of Devonport is now in Braddon; Lyons replaced Wilmot and now includes the West Coast; the Hobart suburbs of Kingston, Blackman's Bay and Taroona were transferred from Denison to Franklin; and the boundary of Denison was moved north to Hilton Creek in Claremont. The number of persons enrolled in each electorate at 1 December 1984 was: Bass, 58 462; Braddon, 57 671; Denison, 59 879; Franklin, 55 861; and Lyons, 57 269.

#### 1984 Federal Election

On the advice of the Prime Minister, Mr Hawke, writs for an election for the House of Representatives and half the Senate were issued on 26 October designating 6 November for the close of nominations and 1 December as polling day.

The election was conducted under a number of major amendments to the *Electoral Act* which followed an inquiry into electoral methods and administration by an all-party committee. Under the new provisions, people became entitled to enrol before their eighteenth birthday if they would turn eighteen after the close of electoral rolls and on or before polling day; party names were shown on ballot papers, electors could vote in the Senate election either by numbering all the candidates in order of preference or for a party or group (and its registered group voting ticket) by writing '1' in a box provided on the ballot paper; mobile polling facilities in some hospitals and certain remote areas were provided; certain electors were able to register as general postal voters to automatically receive postal voting applications; the rules concerning formality were relaxed; registered parties, groups and candidates were able to apply to the Electoral Commission for reimbursement for campaign expenses but had to disclose details of gifts and donations received and expenditure incurred.

The following tables show the candidates and votes for both the Senate and the House of Representatives:

		Sena	ite			
Australian Labor Party	Australian Democrats	Senator Br HARRADI Group		ament	Liberal	
		Candi	date			
Aulich, Terry	Sanders, Norm	Venn, Kath Paulin, Ian A		Archer, Brian		
Devlin, Ray	Newitt, Lyn	Sacco, Coli	1.2441	Anne	Watson, John	
Coates, John White, John			Elizabeth		Townley, Michael Abetz, Eric Cooper, Des Chabrel, Michael	
	ALP	Voting o	details SBHG	NDP	Lib	
Primary Vote—						
Number	108 900	15 897	22 992	7 574	106 427	
Per cent	41.6	6.0	8.7	2.9	40.6	
Quotas	3.3278	0.4858	0.7026	0.2315	3.2523	
	Total j Inform	on roll primary votes al votes il votes cast	290 028 261 790 15 790 (6.03° 277 580 32 724	%)		

#### House of Representatives

Electorate	Candidate		Primary Vote	Party			
Bass	Smith, Warv		27 226	Liberal			
	Preece, Mich	iael L.	2 624	Australia	n Democrats		
	Buchanan, V	icki	22 544	Australia	n Labor Party		
Braddon	Miles, Chris		27 296	Liberal			
	Peart, Greg		22 500		n Labor Party		
	Bugg, Gavin		2 047		n Democrats		
Denison	Willey, Mary	<b>y</b> .	3 747	Independe	ent		
	Hodgman, M	lichael(a)	25 929	Liberal			
	Spurr, Kay		24 230	Australian Labor Party			
Franklin	Thomson, John Dugald Devereaux, John Goodluck, Bruce(a) Holloway, Liz Llewellyn, David		2 916	Australian Democrats			
			20 701	Australian Labor Party Liberal			
			27 315				
Lyons			2 845	Australian			
			23 119	Australian Labor Party			
	Burr, Max(a)	}	25 407	Liberal			
(a) Sitting members	returned						
Voting details		Bass	Braddon	Denison	Franklin	Lyons	
Voters on roll		58 631	57 737	60 285	56 005	57 370	
Total primary votes		52 394	51 843	53 906	50 932	51 371	
Informal votes -				22 700	30 732	31 3/1	
Number		3 511	3 182	3 318	2 737	3 489	
Per cent		6.28	5.78	5.80	5.10	6.36	
Total votes cast	. –						
Number		55 909	55 025	57 224	53 669	54 860	
% enrolment		95.36	95.30	94.92	95.83	95.62	

# Commonwealth Government Departments and Instrumentalities in Tasmania (a)

Aboriginal Affairs - Department of, 80 Elizabeth Street, Hobart, Tel. 20 5011 Officer-in-Charge: Mrs M. Katona

Administrative Services — Department of, Commonwealth Government Centre, Tel. 20 5011

Chief Property Officer: I.M. Preston
Advisory Council for Inter-Government Relations, 110 Hampden Road, Hobart, Tel. 30 8011 Acting Director: Dr C. Balmer

Attorney-General's Department, Commonwealth Government Centre, Tel. 20 5011

Australian Government Solicitor and Director of Legal Services: W.D. Baker Auditor-General's Office, 86 Collins Street, Hobart, Tel. 20 5011 Chief Auditor: F. Self

Australian Archives Office, 4 Rosny Hill Road, Rosny, Tel. 44 0111

Regional Director: R. Middleton

Australian Broadcasting Corporation, 171 Macquarie Street, Hobart, Tel. 30 9903 Manager for Tasmania: J.D. Marshall

Australian Bureau of Statistics, Commonwealth Government Centre, Tel. 20 9555

Deputy Commonwealth Statistician and Government Statistician of Tasmania: G.D. Cocking Australian Electoral Commission, 86 Collins Street, Hobart, Tel. 20 5011

Australian Electoral Officer: D.G. McDermott

Australian Federal Police, Magnet Court, Sandy Bay, Tel. 23 6508

Officer-in-Charge: Inspector W.L. May

Australian Postal Commission, GPO Box, Hobart, Tel. 20 7330

State Manager: J.D. Cowling

Australian Taxation Office, Commonwealth Government Centre, Tel. 20 5011

Deputy Commissioner: G. Brown Australian Telecommunications Commission, 47 Liverpool Street, Hobart, Tel. 20 8111 State Manager: D.J. Robinson

Aviation - Department of,

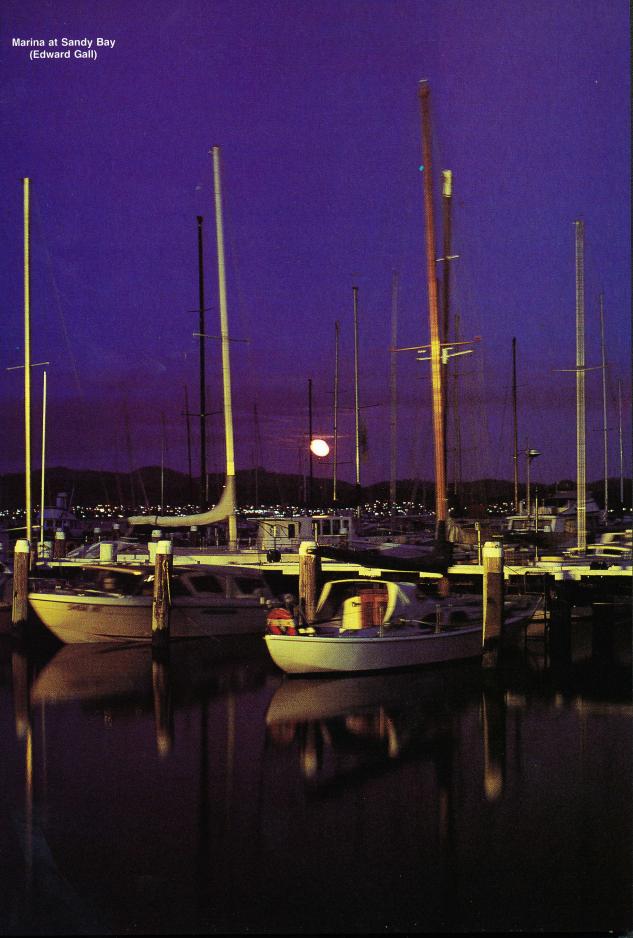
Hobart Airport, Tel. 48 5041 Airport Director: C. Harris

Launceston Airport, Tel. (003) 91 8288

Airport Director: P. Doyle













**GENTIANELLA** diemensis



















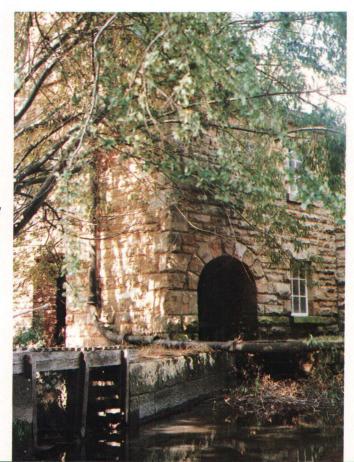


**Redbeard Orchid** 





Entally House (Edward Gall)



Nant Mill, Bothwell (Robert Allan)



Forth River, North-Western Tasmania

(Edward Gall)

Goulds Lagoon, Granton



#### Commonwealth Government Departments and Instrumentalities in Tasmania (a)-continued

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Commissioner for Employees' Compensation, Tasmanian Office, 111 Macquarie Street, Hobart,
     Tel. 23 6076
     Branch Manager: R.G. Leitch
Communications — Department of, 162 Macquarie Street, Hobart, Tel. 20 5011
     State Manager: H. Melling
Conciliation and Arbitration Commission, 39-41 Davey Street, Hobart, Tel. 20 1700
Deputy Industrial Registrar: I. McLeod
Defence — Department of, Anglesea Barracks, Hobart, Tel. 20 0141
     Regional Secretary: E.E. Rodwell, MM
     RAAF Support Unit, 8 Fitzroy Place, Sandy Bay, Tel. 21 2344
     Senior Air Force Officer, Tasmania: Wing Commander P.J.C. Wagner, ADC
     Army Office, Anglesea Barracks, Hobart, Tel. 21 2200
     Commander, Sixth Military District: Colonel J.G. Hughes, AM
     Naval Staff Office, 1 Franklin Wharf, Hobart, Tel. 21 2200
Naval Officer Commanding, Tasmania: Commander M.T.E. Shotter, ADC, RAN Education and Youth Affairs — Department of, 115 Collins Street, Hobart, Tel. 20 5011
     Director: G.J. Aubert
Employment and Industrial Relations — Department of, 45 Murray Street, Hobart, Tel. 20 5011
     Regional Director: N.P. Harrigan
Family Court of Australia, 65 Murray Street, Hobart, Tel. 34 2466
    Registrar: W. Court
Finance — Department of, Commonwealth Government Centre, Tel. 20 5011
     Acting Director: D. Rowberry
Foreign Affairs — Department of, 115 Collins Street, Hobart, Tel. 20 5011
     Senior Foreign Affairs Representative: P.R. Potter
Health — Department of, 2-8 Kirksway Place, Battery Point, Tel. 20 5011
     Regional Director: Dr C.W. Phillips
Health Insurance Commission, 77 Collins Street, Hobart, Tel. 34 7999
    State Manager: J. McArdle
Home Affairs and Environment — Department of, see Australian Archives Office
Housing and Construction — Department of, 162 Macquarie Street, Hobart, Tel. 20 5011
     Controller: E. Hazeldine
Immigration and Ethnic Affairs — Department of, Commonwealth Government Centre, Tel. 20 5011
     Regional Director: P.E. Thomson
Industry and Commerce — Department of, 19 Davey Street, Hobart, Tel. 30 1201 Collector of Customs: T. Minogue
Ombudsman, 23 Kirksway Place, Battery Point, Tel. 34 9200
     Ombudsman: C.R. Woodhouse
Primary Industry — Department of, 162 Macquarie Street, Hobart, Tel. 20 5011 Regional Director: S. Bailey
Public Service Board, Commonwealth Government Centre, Tel. 20 5011
     Regional Director: A. O'Shea
Reserve Bank of Australia, 111 Macquarie Street, Hobart, Tel. 30 1301 Manager for Tasmania: W.M. Gordon
Science and Technology - Department of, 162 Macquarie Street, Hobart, Tel. 30 4095
    State Director: J. Shaw
       Analytical Laboratory, Channel Highway, Kingston, Tel. 29 0389 Director: K. Wilson
       Antarctic Division, Channel Highway, Kingston, Tel. 29 0209
         Acting Director: J. Bleasel

    Meteorology — Bureau of, 20 Ellerslie Road, Hobart, Tel. 23 2834
    Regional Director: E.F. Phillips

Social Security — Department of, Commonwealth Government Centre, Tel. 20 5011
     Director: I. Fletcher
Supreme Court and Sheriff's Department, Salamanca Place, Hobart, Tel. 30 3427
     Registrar and Officer of the High Court: J. Dale
Trade Practices Commission, 1 Franklin Wharf, Hobart, Tel. 34 5155
Acting Regional Director: B.J. Newport

Trade — Department of, 162 Macquarie Street, Hobart, Tel. 20 5011
    Regional Director: P. McNamara
Transport — Department of, Surface Transport Group, 11 Elizabeth Street, Hobart, Tel. 20 5011
     Assistant Director: J. St A. Hartey
Trans Australia Airlines, 4 Liverpool Street, Hobart, Tel. 38 3511
     Manager: B.T. Kearns
Veterans' Affairs — Department of, 2-8 Kirksway Place, Battery Point, Tel. 20 5011 
Deputy Commissioner: J.E. Brotherson, MBE, ED
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(a) As at 29 August 1984

NOTE: The Commonwealth Government Centre is located at the corner of Harrington and Collins Streets, Hobart. All principal offices shown above are within the 002 STD area unless otherwise indicated.

#### TASMANIAN GOVERNMENT

#### **Historical Summary**

In its short history, Tasmania has experienced diverse modes of government; beginning with autocratic rule, it graduated to responsible self-government as a British colony and finally surrendered some sovereign powers to take its place as an original Australian State.

The evolution of the system of bi-cameral responsible government within a federal system falls into five distinct phases:

1803-1825: The island was part of the colony of New South Wales and its lieutenant-governors and commandants were subordinate to the Governor in Sydney.

1825-1851: On 14 July 1825, Van Diemen's Land was created a separate colony with a Lieutenant-Governor directly responsible to the Secretary of State in London. A nominated Legislative Council was established.

1851-1856: The passage of the Australian Constitution Act 1850 by the Parliament in London was followed by the establishment of a new Legilsative Council in which 16 members were elected and eight were nominees of the Lieutenant-Governor. The newly constituted Council first sat on 1 January 1852.

**1856-1901:** By the *Constitution Act* 1854, two houses of parliament, the House of Assembly and the Legislative Council were established, both houses being elected. The first Parliament sat on 2 December 1856 (the first year in which the island was officially called Tasmania); representatives of the Crown carried the title of Governor.

1901: The Tasmanian Constitution was limited by the establishment of the Commonwealth Constitution. (The Commonwealth of Australia Constitution Act 1900 granted legislative and executive powers upon certain specified matters to the Australian Parliament and Government, some of them exclusively, and provision was made that, in the case of inconsistency of valid laws, the Australian Government law should prevail.) In effect, the Parliament of Tasmania may make laws operative within the State upon all matters not within the exclusive power of the Australian Parliament but, on those matters for which the Australian Government may also legislate, the Tasmanian law may be superseded by the passing of an Australian Government act.

#### The State Parliament

Tasmania's legislature consists of the Queen, represented by the Governor, and two houses of parliament: the Legislative Council (upper house) and the House of Assembly (lower house).

#### The Governor

The Governor of Tasmania is the representative of the Sovereign in the State and exercises the powers of the Crown in State matters. The Queen appoints the Governor, on the advice of the Premier, generally for a five-year term. Powers and duties of the Governor are similar to those of the Governor-General.

On all official State occasions, he performs the ceremonial functions as the representative of the Queen. The Governor summons and prorogues parliament; in special circumstances he may dissolve it after considering the advice of his Premier. Bills which have passed all stages in Parliament are submitted to the Governor for his assent although there are some subjects which are specifically reserved for the Royal Assent (e.g. a bill granting land or money to the Governor). He opens each session of Parliament by outlining the legislative program of the Government, but takes no other part in the sittings of either house.

His executive powers include the appointment of ministers of the Crown, judges and other important State officers but not those whose appointments may be made by certain statutory corporations. By appointing ministers of the Crown, the Governor creates the

Executive Council of the day and he is required by his instructions to be guided by the advice of this body. Should he feel it necessary to act against the advice of the Executive Council, he may do so, but the reasons for such action must be immediately reported to the Queen.

If the Governor is to be absent for a period in excess of one month, the Chief Justice acts as Administrator. Until the succession of Sir Stanley Burbury, KBE on 5 December 1973, Tasmanian governors came from the United Kingdom, although in some other States and the Commonwealth, Australians had been appointed to the vice-regal Office. Tasmania's present Governor is H.E. Sir James Plimsoll AC, CBE who was sworn in in 1982.

Succession of Governors, Acting Governors, Administrators, etc. from 1924

Name	Designation	Period
Sir James O'Grady, KCMG	Governor	23.12.24-23.12.30
Sir Herbert Nicholls, KCMG	Lieutenant-Governor	23.12.30- 4. 8.33
Sir Ernest Clark, KCMG, KCB, CBE	Governor	4. 8.33- 4. 8.45
Sir John Morris, KT	Administrator	4. 8.45-24.12.45
Admiral Sir Hugh Binney, KCB, KCMG, DSO	Governor	24.12.45- 8. 5.51
Sir John Morris, KCMG	Administrator	8. 5.51-22. 8.51
Rt. Hon. Sir Ronald Cross, Bart, KCMG, KCVO.	Governor	22. 8.51- 4. 6.58
Hon. Sir Stanley Burbury, KBE	Administrator	4. 6.58-21.10.59
Rt. Hon. the Lord Rowallan, KT, KBE, MC	Governor	21.10.59-25. 3.63
Hon. Sir Stanley Burbury, KBE	Administrator	25. 3.63-24. 9.63
Lt-General Sir Charles Gairdner, KCMG, KCVO,		
KBE, CB	Governor	24. 9.63-11. 7.68
Hon. Sir Stanley Burbury, KBE	Administrator	11, 7.68- 2.12.68
Lt-General Sir Edric Bastyan, KCMG, KCVO, KBE,		
CB	Governor	2.12.68-30.11.73
Hon. Mr Justice Green	Administrator	30.11.73- 5.12.73
Hon. Sir Stanley Burbury, KCVO, KBE	Governor	5.12.73-30. 9.82
Hon. Sir Guy Green, KBE	Lieutenant-Governor	1. 4.82-30. 9.82
Sir James Plimsoll, AC, CBE	Governor	1.10.82-

NOTE: A complete list of Governors, Acting Governors and Administrators from 1803, and a more comprehensive description of Tasmania's vice-regal representation is contained in the 1976 edition of the *Year Book*.

#### The Cabinet and Executive Government

In Tasmania, as in the other States and the Commonwealth, executive government is based on the system which was evolved in Britain in the 18th century, and which is generally known as 'Cabinet', or 'responsible' government. Its essence is that the head of the State (in Tasmania, the Governor representing Her Majesty the Queen) should perform governmental acts on the advice of his ministers; that he should choose his ministers of State from members of parliament belonging to the party, or coalition of parties, commanding a majority in the popular house; that the ministry, so chosen should be collectively responsible to that house for the government of the country; and that the ministry should resign or advise an election if it ceases to command a majority there.

The Cabinet system operates chiefly by means of constitutional conventions, customs or understandings, and through institutions that do not form part of the legal structure of the government at all. In law, the executive power of the State is exercised by the Governor who is advised by the Executive Council which he himself has appointed and which meets for certain formal purposes.

#### Premiers

The present Premier of Tasmania is The Honourable Robin Trevor Gray who, as leader of the Liberal Party, assumed office following the Liberal Party gaining a majority in the 1982 election.

The following table lists Premiers of Tasmania from 1928 (a complete list from 1856 is included in the 1976 *Year Book*):

Tasmanian	Promiere	from	1079

Name of Brancian	Term	Duration of	
Name of Premier	From	То	office (months)
J. C. McPhee	15.6.28	15.3.34	69
Sir Walter Lee	15.3.34	22.6.34	3
A. G. Ogilvie (a)	22.6.34	10.6.39	60
E. Dwyer Gray	11.6.39	18.12.39	6
R. Cosgrove	18.12.39	18.12.47	96
E. Brooker	18.12.47	25.2.48	2
R. Cosgrove	25.2.48	26.8.58	126
E. E. Reece	26.8.58	26.5.69	129
W. A. Bethune	26.5.69	3.5.72	35
E. E. Reece	3.5.72	31.3.75	35
W. A. Neilson	31.3.75	1.12.77	32
D. A. Lowe	1.12.77	11.11.81	47
H. N. Holgate R. T. Gray	11.11.81 26.5.82	26.5.82	7

<sup>(</sup>a) Tasmania had an unbroken succession of Labor Premiers, starting with the Ogilvie Ministry (1934) until the electoral defeat of the Reece government on 26 May 1969.

### Ministry

Legally, ministers hold office during the pleasure of the Governor. In practice, however, the discretion of the Head of State in the choice of ministers is limited by the conventions on which the Cabinet system rests.

At 28 September 1984 members of the Liberal ministry were:

Premier, Treasurer, Minister for State Development, Energy and Forests

The Hon. Robin Trevor Gray, MHA

Deputy Premier, Leader of the House, Attorney-General, Minister for Tourism, Racing and Gaming and Industrial Relations

The Hon. Geoffrey Allan Pearsall, MHA

Minister for Education, Lands and National Parks

The Hon. Richard John Beswick, MHA

Minister for Local Government, Main Roads, Primary Industry and Water Resources
The Hon. Ian Maxwell Braid, MHA

Minister for Health, Ethnic Affairs and Community Welfare and The Elderly The Hon. Thomas John Cleary, MHA

Minister for Environment, Licensing, Construction and Administrative Services
The Hon. Geoffrey Bertrand Davis, MHA

Minister for Transport, Mines, Sea Fisheries, Road Safety and Police and Emergency Services

The Hon. Francis Roger Groom, MHA

Minister for Small Business, Housing, Consumer Affairs and Inland Fisheries
The Hon. Brendan Aloysius Lyons, MHA

## Ministerial Responsibility

The ministers of the Cabinet are held responsible for the actions and administration of government departments and other governmental authorities which have been created for three basic purposes: to put into practice the laws made by parliament; to give effect to the decisions of the ministry; and to advise the ministry on matters of policy.

The next section lists the departments and authorities under the various ministers but the allocation of responsibility is subject to change and Cabinet has the power to vary it at any time. The previous section headed 'Ministry' lists the names of ministers holding the various portfolios.

## Cabinet Portfolios and Responsibilities at 4 July 1984

Cabinet Portfolios and	d Responsibilities at 4 July 1984
Premier, Treasurer, Minister for State De	velopment, Minister for Energy, Minister for Forests
Premier's Department Tasmanian Development Authority Audit Department The Ombudsman Anzac Day Trust	Treasury Department Hydro-Electric Commission Southern Regional Cemetery Trust Forestry Commission
	r Tourism, Minister for Industrial Relations, Minister for ng and Gaming
Law Department— Attorney-General's Division Crown Solicitor's Division Prisons Division Registrar-General's Division Corporate Affairs Office Department of Tourism Department of Labour and Industry Office of Industrial Relations Electoral Department	Public Trust Office Supreme Court and Sheriff's Department Coal Mining Industry Long Service Leave Trust Plumbers' Registration Board Public Service Arbitrator Public Service Board Workers' (Occupational Diseases) Relief Fund Board Tasmanian Racing Directorate Gaming Commission Totalizator Agency Board
Minister for Education, Minist	er for Lands, Minister for National Parks
Education Department Division of Recreation National Parks and Wildlife Service State Library of Tasmania Lands Department Apprenticeship Commission	Council of Advanced Education Tasmanian Arts Advisory Board Tasmanian Museum and Art Gallery Theatre Royal Board University of Tasmania
Minister for Small Business, Minister for Hou	ising, Minister for Consumer Affairs, Minister for Inland Fisheries
Inland Fisheries Commission Tasmanian Government Insurance Office Motor Accidents Insurance Board	Department of Housing Consumer Affairs Council
Minister for Health, Minister for Communit	y Welfare and the Elderly, Minister for Ethnic Affairs
Dental Board of Tasmania Department of Health Services Tasmanian Ambulance Service Nurses' Registration Board Pharmacy Board of Tasmania Physiotherapists Registration Board Radiographers Registration Board	Division of Public Health Department for Community Welfare Alcoholic and Drug Dependency Board Mental Health Services Commission Division of Handicapped Persons' Services Kennerley Children's Homes Board Royal Tasmanian Society for the Blind and Deaf
Minister for Construction, Minister for the En	vironment, Minister for Administrative Services, Minister or Licensing
Department of Construction Department of the Environment Government Printing Office	Supply and Tender Department Royal Tasmanian Botanical Gardens Licensing Board

### Cabinet Portfolios and Responsibilities at 4 July 1984—continued

Minister for Primary Industry, Minister for Main Roads, Minister for Local Government, Minister for Water Resources

Department of Agriculture

King Island Abattoirs Board

Soft Fruit Industry Board

Rivers and Water Supply Commission

Metropolitan Water Board

Stanley Cool Stores Board

Div

Department of Main Roads

North-West Regional Water Authority
Dairy Industry Authority
Egg Marketing Board
Tasmanian Grain Elevators Board
Tasmanian Herd Improvement Organisation
Division of Municipal Planning
Town and Country Planning Commission

Minister for Mines, Minister for Transport, Minister for Sea Fisheries, Minister for Police and Emergency Services, Minister for Road Safety, Minister for Public Administration

Mines Department Transport Tasmania Metropolitan Transport Trust Tasmanian Fisheries Development Authority Division of Road Safety Public Service Board Department Police Department State Emergency Service Tasmanian Fire Service

### The House of Assembly

The Tasmanian Lower House comprises 35 members elected for a term of four years from five seven-member electorates.

#### 1982 Election

Following a vote of non-confidence in the Holgate Labor Government, the Assembly was dissolved. At the subsequent election held on 15 May 1982, the Liberal Party, led by Mr Robin Gray, gained a three seat majority and, for the first time formed a government in its own right. Three ministers lost their seats and six new members were elected. First preference votes cast statewide, by party, were as follows: Liberal Party 121 346 (48.5%); ALP 92 184 (36.81%); Independents 23 090 (9.23%); Australian Democrats 13 476 (5.3%). The composition of the new Assembly was: Liberal 19 seats; ALP 14 seats; Australian Democrats one seat; Independent one seat. Four members, Dr N. Sanders, M.T. Barnard, M. Bingham and J. Devine resigned during their term of office and were replaced by Dr R. Brown, P. Patmore, C. Holmes and R. Graham.

The next table shows the results of House of Assembly elections by parties from 1959:

#### Representation of Parties for the Whole State: House of Assembly

	La	Labor		peral	Other (a)	
Election year	Propor- tionate share (b)	Seats won	Propor- tionate share (b)	Seats won	Propor- tionate share (b)	Seats won
1959	15.58	17	14.37	16	5.05	2
1964	17.97	19	13.47	16	3.56	
1969	15.91	17	14.68	17	4.41	1
1972	19.22	21	13.43	14	2.35	
1976	18.37	18	15.57	17	1.06	
1979	19.01	20	14.46	15	1.53	
1982	12.90	14	16.98	19	5.12	2

<sup>(</sup>a) Independents and minority parties.

## Members of the House of Assembly

The following table shows members of the House of Assembly and their party allegiance as at 10 September 1984:

<sup>(</sup>b) State treated as single electorate and proportionate share of seats calculated on basis of first preference votes cast for parties.

Members	of the	House of	Assembly as at	10	Sentember	1984
Members	or use	HOUSE OF	Assembly as at		September	1704

Electoral division	Member's name	Party affiliation
Bass	Beswick, The Hon. Richard John Bushby, The Hon. Maxwell Holmes (a) Holgate, The Hon. Harold Norman James, Gillian Hilma Lyons, Brendan Aloysius Patmore, Peter John Robson, The Hon. Neil Maxwell	Liberal Liberal ALP ALP Liberal ALP Liberal
Braddon	Bonney, Raymond Claude Cornish, Ronald Coughlan, John Anthony Davies, Ronald Glen Field, Michael Walter Groom, The Hon. Francis Roger Smith, Vincent John	Liberal Liberal ALP ALP ALP Liberal Liberal
Denison	Amos, Julian John Brown, Robert James Davis, The Hon. Geoffrey Bertrand Graham, Robert John Haros, Gabriel George Holmes, Carmel Maude Walker, Peter Benson	ALP Ind. Liberal ALP Liberal Liberal Liberal
Franklin	Aird, Michael Anthony Beattie, John Maxwell (b) Cleary, The Hon. Thomas John Lowe, The Hon. Douglas Ackley McKinnon, William Gillies Pearsall, The Hon. Geoffrey Allan (c) Wriedt, The Hon. Kenneth Shaw (d)	ALP Liberal Liberal Ind. ALP Liberal ALP
Wilmot	Baldock, Darrel John Braid, The Hon. Ian Maxwell Gray, The Hon. Robin Trevor (e) Lohrey, Andrew Barnard Page, Graeme Reginald Polley, Michael Robert Salter, Stephen Gordon	ALP Liberal Liberal ALP Liberal ALP Liberal

<sup>(</sup>a) Speaker. (b) Chairman of Committees. (c) Deputy Premier. (d) Leader of the Opposition. (e) Premier.

### The Legislative Council

The Legislative Council has the tradition of being a non-party house; in 1984 the composition of the house was 18 Independents and one Labor Party representative. The leader for the Government in the Legislative Council cannot rely upon a vote taken on party lines to ensure the passage of any government bill. It is the ability to command a majority in the House of Assembly which gives a party the right to form the government of the day and which ensures the passage of government legislation through the lower house; no such certainty exists in the passage of bills through the upper house.

Following conflict between the two Houses of Parliament over a money bill during 1924 and 1925, the *Constitutional Amendment Act* 1926 was passed. This Act defined the relations between the two Houses, especially with regard to the passing of money bills. The following current principles are found in the Act:

- the Legislative Council retains the right to reject any bill, including a money
- the Council is specifically prevented from amending bills to raise revenue for the ordinary annual services of the Government and bills imposing land and income tax;

- it can suggest to the House of Assembly that amendments be made but the adoption or rejection of such amendments is at the discretion of the Assembly; and
- the operation of such bills is restricted to a period of one year.

Apart from the above specific exceptions, the Council retains the right to amend money bills, e.g. those dealing with loan funds or probate. The House of Assembly is given the sole right to initiate bills for the raising of revenue and the imposition of taxes. Finally, the powers of the two houses are declared equal in all matters except for these specific exceptions.

## Legislative Council Members

Each member, when elected, holds office for six years and Council elections are held every year to elect three members; every sixth year four members are elected. There are no general elections for the Legislative Council. The next table shows members of the Legislative Council (following the elections held in the Divisions of Mersey, Cornwall and Huon on 4 May 1984), the electoral division which they represent and the year in which each will retire from the Council:

Members of the Legislative Council, September 1984

Electoral division	Member's name	Year of retirement
Buckingham	Lowrie, The Hon. Kenneth Francis (a)	1986
Cornwall	McKendrick, The Hon. Robin	1990
Derwent	Batt, The Hon. Charles Leo (b)	1985
Gordon	Broadby, The Hon. Albert James (c)	1988
Hobart	Petrusma, The Hon. Hendrik	1988
Huon	Hodgman, The Hon. Peter (d)	1990
Launceston	Wing, The Hon. Donald George	1988
Macquarie	Shaw, The Hon. George Arthur	1986
Meander	Hope, The Hon. Reginald Thomas	1985
Mersey	Braid, The Hon. Henry William	1990
Monmouth	Wilson, The Hon. Stephen John	1987
Newdegate	Miller, The Hon. Brian Kirkwall	1987
Pembroke	McKay, The Hon. Peter Charles	1989
Queenborough	Stopp, The Hon. Eric John Chancellor	1989
Russell	Fletcher, The Hon. Anthony William	1987
South Esk	Archer, The Hon. Richard Clive	1986
Гатаг	Coates, The Hon. Jeffrey Allan	1989
West Devon	Hiscutt, The Hon. Hugh James	1989
Westmorland	Gregory, The Hon. Oliver Harold	1985

<sup>(</sup>a) Leader for the Government in the Legislative Council. (b) Endorsed by the Australian Labor Party; other members are independents. (c) President. (d) Deputy Leader.

## Salaries of Members of Parliament

Under the provisions of the Parliamentary Salaries and Allowances Act 1973, as amended by the Parliamentary Salaries and Allowances Act (No 2) 1984, Members are paid a basic salary of \$34 630 per annum. As from 1 July 1984, when awards or amending awards are made which affect all, or substantially all employees of the Tasmanian State Service, the Auditor-General adjusts Members' basic salary by the relevant amount of percentage. Thus Members' salaries are effectively tied to those of public servants; in the past adjustments were made on an annual basis.

Special Rates	Payable in	Addition	to	the	Basic	Salary
•	(Pe	r Cent)				•

Particulars	Additional salary payable as pro- portion of basic salary (a)	Particulars	Additional salary payable as pro- portion of basic salary (a)
Cabinet—		House of Assembly—	
Premier	125	Speaker	331/3
Deputy Premier	85	Chairman of Committees	20
Ministerial office	70	Leader of the Opposition	70
Secretary to Cabinet	30	Deputy Leader of the	
·		Opposition	17
Legislative Council—		••	
President	331/3		
Leader of the Government .	70	Government Whip	6
Chairman of Committees Deputy Leader of the	20	Opposition Whip	6
Government	11		

<sup>(</sup>a) Salary in excess of basic rate (e.g. the Premier receives basic rate + 1.25 × basic rate), i.e. \$77 917 from January 1984.

Allowances Payable to Members: Electoral allowances, and entertainment allowances are calculated as a portion of the base rate. Travel allowances are related to rates payable to permanent heads of State Government Departments. The next table shows the electoral allowances payable as a proportion of the basic salary:

Electoral Allowances Payable as a Proportion of the Basic Salary (a) (Per Cent)

Electoral division	Proportion of basic salary payable	Electoral division	Proportion of basic salary payable
Legislative Council—		Legislative Council—	
Buckingham	13	Queenborough	11
Cornwall	12	Russell	26
Derwent	181/2	South Esk	26
Gordon	26	Tamar	181/2
Hobart	11	West Devon	17
Huon	181/2	Westmorland	14
Launceston	12	House of Assembly—	
Macquarie	20	Bass	26
Meander	22	Braddon	30
Mersey	17	Denison	15
Monmouth	24	Franklin	21
Newdegate	11	Wilmot	35
Pembroke	13		

<sup>(</sup>a) The basic salary payable from 1 January 1984 was set at \$34 630 in July 1983.

### The State Electoral System

The electoral system is administered by the Electoral Department which is responsible for the registration or enrolment of electors, the preparation of rolls and the conduct of elections for the Legislative Council and House of Assembly and of referenda.

#### Franchise

### Qualifications of Electors, State Elections

In the mid 1800s franchise for the Legislative Council was extended to owners of freehold estates with an annual value of 50 pounds as well as graduates, ministers of religion, lawyers, doctors and retired military officers. Franchise for the House of Assembly was granted to those with professional qualifications as for the Legislative Council: those who possessed a freehold estate with a value of at least 100 pounds, householders who paid 10 pounds annual rent and to salary earners with an annual income of 100 pounds or more.

Today an elector for both the House of Assembly and the Legislative Council is any person aged at least 18 years, male or female, who has lived in the State for six months continuously, who is natural-born or a naturalised subject of the Queen and whose name is on the electoral roll for an electoral division. (Legislation reducing the voting age to 18 years passed both Houses of Parliament in mid-1973.) Voting has been compulsory since the passing of the *Electoral Act* 1928. Special qualifications which had previously been required for electors of the Legislative Council were abolished on 1 July 1969.

## Qualifications of Members, State Parliament

House of Assembly: To be eligible for election as a member of the House of Assembly, a candidate must either be an elector or be qualified to be an elector for the House of Assembly and resident in Tasmania for five years at any one time or resident for two years immediately preceding the election.

Legislative Council: A candidate for the Legislative Council must be an elector or have the qualifications of an elector for the Council; in addition, he must meet the residential restrictions imposed on candidates for the House of Assembly.

Persons of unsound mind or in prison under any conviction are barred from voting at elections for either house or from being elected to either house. No person shall be a member of both houses at the one time.

#### **House of Assembly Elections**

### **Electorates**

The five electorates for the House of Assembly are the five House of Representatives electorates under a Joint-Roll agreement. Following an electoral redistribution for the House of Representatives, the State Government adopted the new boundaries for the House of Assembly in legislation presented to Parliament in November 1984. A map showing the new boundaries is included earlier in the chapter under the heading 'The House of Representatives'. The number of persons enrolled in each electorate is also included.

### Elections for the House of Assembly

Elections for the House of Assembly are conducted under a system which can be classified as proportional representation by the single transferable vote (commonly known as the Hare-Clark system).

The essential features of the system are as follows:

- (i) For an elector to cast a valid vote, he must express at least seven preferences.
- (ii) Party groups are identified on ballot papers, with ungrouped candidates listed together on the right of the ballot paper. Candidates' positions within groups are determined by a system of rotation so that in designated 'preferred' positions, all candidates appear on the same number of ballot papers.
- (iii) To secure election, candidates must secure a quota in accordance with the Droop formula (i.e. the total first-preference votes in the constituency divided by eight, plus one vote; see over).

- (iv) Should a candidate secure an exact quota on first preferences, he is declared elected and his voting papers are set aside as finally dealt with.
- (v) Any candidates who secure a surplus of first preferences above the quota are declared elected.
- (vi) For each elected candidate, commencing with the one with the largest surplus, a transfer value is calculated by dividing the successful candidate's number of surplus first preference votes by his total number of first preferences. All his voting papers are then re-examined and the number of next available choice votes for each of the non-elected candidates, determined and multiplied by the transfer value. The resulting numbers are added to the non-elected candidates' respective numbers of first preference votes.
- (vii) Where a transfer raises the number of votes obtained by a candidate up to a quota, he is declared elected. That particular transfer is then completed but no further votes of any other candidate are transferred to him.
- (viii) In the case of a candidate who reaches a quota through transferred votes, his surplus votes above the quota are divided by the number of voting papers transferred to him in the last transfer. The resulting fraction is the transfer value which is applied to voting papers he obtained in the last transfer which are then transferred to remaining unelected candidates according to the next available choices.
  - (ix) When transfers have been completed in respect of all candidates who obtained a surplus above a quota as a result of the above procedures, the candidate who is lowest on the poll is excluded and his voting papers are distributed to the remaining non-elected candidates according to the next available choices. His own first preference votes are transferred first, retaining a value of one each. Voting papers that have been transferred to him are dealt with in the order of the transfers already carried out and retain the respective transfer values at which he obtained them.
  - (x) Steps (vi) and (ix) are continued, as necessary, until either seven candidates are elected or all candidates except seven have been excluded. In the latter case, unexcluded candidates not already elected are declared elected.

The scrutiny of preferences and distribution of choices cannot commence until all votes are to hand—this does not occur until the Friday following polling day. As might be expected the counting of votes, calculation of transfer values and the transferring of votes are time-consuming operations and a week may elapse before the declaration of a poll.

NOTE: The 'Droop formula' states that the minimum number of votes necessary to secure election is the total number of votes divided by one more than the number of members to be elected, plus one vote.

Advantages of the Hare-Clark System: The major advantage claimed for the system is that the composition of the House of Assembly tends to faithfully reflect the wishes of the electors viewed on a State basis, and that a party with a minority of first preferences is most unlikely to obtain a majority of seats, as sometimes occurs in systems with single-member constituencies. By way of example, South Australia, using single-member electorates has sometimes been governed by parties receiving a minority of votes but a majority of seats; other Australian States have had similar experiences. A futher significant advantage is that all electors have a wide choice of candidates within the parties, whereas in single-member electorates there is usually no choice of candidates for an elector determined to vote for a particular party. In the latter case, an elector may be forced to vote for a candidate whom he considers to be less than competent.

By-Elections

In the case of a vacancy occurring in the House of Assembly, there is provision for the Chief Electoral Officer to publicly invite nominations from candidates who were unsuccessful at the last general election in the constituency which elected the vacating member. If one nomination only is received, the consenting candidate is declared elected and the Governor notified to this effect.

If more than one such nomination is received, the Chief Electoral Officer is required to examine the voting papers counted for the vacating member at the last general election. In the simple case—where the vacating member obtained a surplus of first preference votes above the quota—this can be confined to voting papers expressing that first preference. In the more difficult case—where the vacating member did not obtain a quota on first choices—it is necessary to take into account not only original first-choice papers but also all voting papers representing votes transferred to the vacating member.

The vacating member's voting papers, as defined above, are examined and all his votes are transferred to the consenting candidates according to the preferences expressed thereon. Next available choices derived from first-choice votes of the vacating member have a transfer value of one, but from votes he obtained by transfer, only the value at which he obtained them. For the purpose of the count, first-choice votes received by the consenting candidates at the general election are not relevant—the selection is based on preferences as revealed by the voting papers of the vacating member.

When the number of votes in favour of each consenting candidate has been ascertained, the final selection is by the method of the absolute majority through the alternative vote. If no nominations are received from candidates unsuccessful at the last general election, then an election is held to fill the vacancy.

### Dissolution of House of Assembly

The Governor may dissolve the House of Assembly whenever he considers it desirable but he has no power to dissolve the Legislative Council. In effect then, the Legislative Council is a perpetual body except that approximately one-sixth of its seats fall vacant annually. As there is no provision for a double dissolution the Legislative Council, by rejection of a Supply Bill, can force the House of Assembly to seek a dissolution without itself needing to face the electorate. This last occurred in 1948. In practice, the Governor considers dissolving the House of Assembly only when requested to do so by his ministers.

## Sessions of Parliament

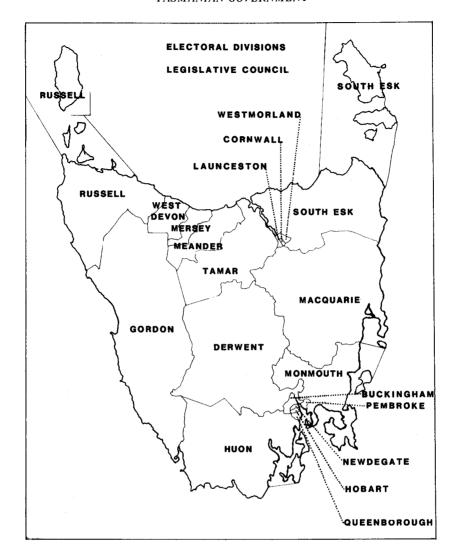
Parliament is required to sit every year and, having risen, must sit again before 12 months have elapsed. When the House of Assembly is dissolved and a general election held, the Governor is required to call Parliament together within 90 days of the dissolution, subject to a disretionary extension of a further 30 days.

#### **Legislative Council Elections**

### Boundaries, Legislative Council Divisions

In 1980 the Legislative Council established a Select Committee to recommend changes to its electoral boundaries. As a result of the findings of this Committee, an amendment to the *Constitution Act* was passed and received Royal Assent on 3 December 1980. Boundary changes took effect immediately after the Legislative Council elections held on 23 May 1981.

The following map shows the 19 single-member constituencies into which the State is divided for Legislative Council elections, and the accompanying table shows the number of voters enrolled in each division:



Legislative Council: Enrolments by Electorate at 30 September 1984

Electoral divisions (a)		Enrolments	Electoral	divisions (a)	Enrolments
Buckingham Cornwall Derwent Gordon Hobart Huon Launceston Macquarie	(H) (R) (S) (H) (R) (L) (R)	15 073 12 462 13 524 5 890 15 305 16 309 14 384 10 876	Newdegate Pembroke Queenborough Russell South Esk Tamar West Devon Westmorland	(H) (H) (H) (R) (R) (R) (BP) (L)	13 308 18 847 13 145 12 903 12 468 11 727 15 855 13 134
Meander Mersey Monmouth	(R) (DU) (R)	11 321 18 223 13 056	Total		257 810

<sup>(</sup>a) (H) = Hobart and suburban; (L) = Launceston and suburban; (BP) = Burnie and Penguin municipalities; (DU) = Parts of Devonport and Ulverstone municipalities; (R) = rural; (S) = special.

Elections for the Legislative Council

Elections for the Legislative Council are conducted under a system known as preferential voting.

An amendment to the *Electoral Act* 1907 in 1980 changed the method of determining the positions of candidates' names on ballot papers. Previously the order of candidates' names was determined by ballot. (Prior to a 1973 amendment to the *Electoral Act*, candidates' names appeared in alphabetical order.) The 1980 amendment, however, introduced a system of 'rotating ballot papers' for both Houses. This provides that there shall be different batches of ballot papers on which candidates' names are placed in different positions. Although the system does not provide for all possible permutations, it ensures that all candidates are given an equal opportunity to share in the assumed benefit attached to being placed in designated 'preferred' positions on a ballot paper. If there are two candidates, the voter need only vote for one. If there are three or more candidates, the voter must indicate at least three preferences to record a valid vote. Unlike ballot papers for House of Assembly elections, candidates' names on Legislative Council papers are not grouped to show party allegiance, nor is there any indication whether or not a candidate belongs to a political party.

If any candidate secures first-preference votes exceeding half the total first preferences, he is declared elected. If no candidate satisfies this condition, then the candidate with the least votes is excluded and the second preferences shown on his voting papers are transferred to other candidates, the transfer value of each such second preference being equal to one. If no candidate then has the required majority, the process of exclusion is repeated until such time as one candidate secures the majority.

The method of counting is identical with that used in elections for the Federal House of Representatives and is termed preferential. The full description is election by absolute majority through use of the alternative vote.

**By-Elections** 

In the case of a vacancy occurring in the Legislative Council, a writ is issued directing that an election be held to fill the vacancy. There is no provision for a re-count of voting papers of the vacating member as for the House of Assembly.

### State Emblems

Coat-of-Arms

The Tasmanian coat-of-arms features two Tasmanian Tigers supporting a shield. Contained within the shield are five symbols: a ram, a sheaf of wheat, apples, hops (representing pastoral and agricultural activities) and a thunderbolt (representing hydro-electric development). Above the shield is a lion 'passant' (which probably originated from the British Royal Family). A pick and shovel, representative of the mining industry, appear in front of the lion. The motto 'ubertas-et-fidelitas' interpreted as 'Fertility and Faithfulness' completes the coat-of-arms which was promulgated in 1919. Badge

The State badge was originally gazetted in 1876. The badge is oval shaped and features a lion (in the same form as the coat-of-arms), a crown and the words 'Government of Tasmania'. It is seldom used for official purposes.

Flag

On 25 September 1876 the Governor of Tasmania decreed that the distinguishing flag for vessels employed by the Government of Tasmania shall be a blue ensign with a red lion on a white shield superimposed. The flag was subsequently adopted for general State Government use, but it was not until 3 December 1975 that the design was officially gazetted. There is no record of the reason for using the lion 'passant' on the State flag. Lions have featured in British heraldry for centuries; this may have been a factor influencing the choice. The Union Jack occupies the upper quarter next to the staff.

#### Floral Emblem

The Tasmanian Blue Gum, Eucalyptus globulus Labill, was proclaimed as the floral emblem of the State of Tasmania on 27 November 1962. In favourable situations, the Tasmanian Blue Gum will grow to approximately 60 metres in height. The trunk is smooth and greyish-white in the upper part but often rough and deeply furrowed at the base. The name 'Blue Gum' refers to the appearance of the juvenile leaves which are glaucous (bluish-grey and waxy), 6-15 cm long, almost oblong but bluntly pointed at the tip and rounded at the base, and borne in opposited pairs on square stems. The leaves of the mature tree are green and glossy, 15-36 cm long, usually sickle-shaped and borne alternatively on rounded stems. The flowers are larger than those of other Tasmanian eucalypts. The tree is widespread and locally abundant in southern and eastern Tasmania and also occurs in restricted areas near the West Coast and on King and Flinders Islands. It also occurs at Wilson's Promontory and Cape Otway in Victoria.

Of all the Australian eucalypts, E. globulus is the species which has been most widely introduced overseas. It is now widespread in California and in parts of Chile, Argentina and New Zealand. It has also been established throughout the Mediterranean region, in many parts of Africa and in India. The tree is used as a source of timber for heavy construction work, paper-pulp making, fuel and pit props. Oil is extracted from the leaves.

There is no officially gazetted State fauna or bird emblem for Tasmania.

## Australia's National Anthem

Australia's National Anthem was officially gazetted on 19 April 1984. The Governor-General proclaimed that the National Anthem shall consist of the tune known as 'Advance Australia Fair' with the following words:

Australians all let us rejoice. For we are young and free; We've golden soil and wealth for toil; Our home is girt by sea; Our land abounds in nature's gifts; Of beauty rich and rare: In history's page, let every stage Advance Australia Fair. In joyful strains then let us sing, Advance Australia Fair. Beneath our radiant Southern Cross We'll toil with hearts and hands; To make this Commonwealth of ours Renowned of all the lands; For those who've come across the seas We've boundless plains to share; With courage let us all combine To Advance Australia Fair. In joyful strains then let us sing. Advance Australia Fair.

# State Government Departments and Officials (a)

Agricultural Department, Marine Board Building, 1 Franklin Wharf, Hobart. Tel. 30 8022 Director: P. J. Fountain

Apprenticeship Commission, 24 Murray Street, Hobart. Tel. 30 8011 Secretary: G. J. Williams

Audit Department, TGIO Building, 144 Macquarie Street, Hobart. Tel. 30 8011

Auditor-General: D. E. Kirby

Community Welfare, Department for, 12 Murray Street, Hobart. Tel. 30 8011 Director: D. W. Daniels

# State Government Departments and Officials (a)-continued

Construction, Department of, 10 Murray Street, Hobart. Tel. 30 8033 Director: B. Davis

Consumer Affairs Council, 25 Davey Street, Hobart. Tel. 30 8011 Secretary: J. P. Cliffe-Hickling

Council of Advanced Education, Newnham Drive, Newnham. Tel. 003 26 0201 Chairman of Council: E. A. Rouse

Dairy Industry Authority, PO Box 976, Launceston. Tel. 003 31 9666 Chairman: B. J. Smithies

Education Department, 116 Bathurst Street, Hobart. Tel. 30 8022 Director-General: K. J. Axton

Electoral Department, TGIO Building, 144 Macquarie Street, Hobart. Tel. 30 8011 Chief Electoral Officer: K. F. Febey

Environment, Department of the, 161 Davey Street, Hobart. Tel. 30 8011 Director: J. F. Pottinger

Fisheries Development Authority, 23 Old Wharf, Hobart. Tel. 30 8022 Chairman: R. T. McKay

Forestry Commission, 199 Macquarie Street, Hobart. Tel. 30 8033 Chief Commissioner: J. R. Quick

Gaming Commission, 144 Macquarie Street, Hobart. Tel. 30 8011 Chairman: P. J. Power

Government Printing Office, 2 Salamanca Place, Hobart. Tel. 30 8033 Government Printer: A. B. Caudell

Health Services, Department of, Cnr Davey and Murray Streets, Hobart. Tel. 30 8022 Director-General: Dr G. Mackay-Smith

Housing, Department of, Farley Street, Glenorchy. Tel. 74 0101 Director-General: C. A. Sproule

Hydro-Electric Commission, 4-16 Elizabeth Street, Hobart. Tel. 30 1101 Commissioner: J. R. Ashton

Inland Fisheries Commission, 127 Davey Street, Hobart. Tel. 23 6622 Commissioner: Dr R. Sloane

Labour and Industry, Department of, 81-89 Brisbane Street, Hobart. Tel. 30 8011 Secretary for Labour: G. Urquhart

Lands Department, 134 Macquarie Street, Hobart. Tel. 30 8033 Director-General of Lands: R. H. Annells

Law Department-

Attorney-General's Division, Savings Bank of Tasmania Building, 39 Murray Street, Hobart. Tel. 30 8022

Secretary: J. A. Ramsay

Registrar-General's Division, 134 Macquarie Street, Hobart. Tel. 30 8011

Registrar-General and Recorder of Titles: E. R. Thorpe

Solicitor-General, Savings Bank of Tasmania Building, 39 Murray Street, Hobart. Tel. 30 8022

Solicitor-General: C. R. Wright

Prisons Division, East Derwent Highway, Risdon. Tel. 43 8022

Controller of Prisons: H. Howe

Supreme Court and Sheriff's Division, Salamanca Place, Hobart. Tel. 30 8022 Secretary: J. Dale

Licensing Board (Liquor), Henty House, Civic Square, Launceston. Tel. 003 32 2261 Commissioner for Licensing: R. B. Middleton

Local Government Office, 30 Davey Street, Hobart. Tel. 30 8011 Director of Local Government: D. B. Shirley

Main Roads, Department of, 10 Murray Street, Hobart. Tel. 30 8033 Director of Main Roads: L. J. Baily

#### State Government Departments and Officials (a)—continued

- Mental Health Services Commission, 141 Hampden Road, Battery Point. Tel. 30 8022

  Chairman and Medical Commissioner: Dr J. Tooth
- Metropolitan Transport Trust, 49 Macquarie Street, Hobart. Tel. 38 3232 Chairman: T. M. C. Maclurkin
- Metropolitan Water Board, 183 Macquarie Street, Hobart. Tel. 30 8033 Chairman: D. G. Schaffner
- Mines Department, Cnr Bligh Street and Gordon's Hill Road, Rosny Park. Tel. 30 8033 Director: H. Murchie
- National Parks and Wildlife Service, 16 Magnet Court, Sandy Bay. Tel. 30 8033 Director: P. Murrell
- Office of Parliamentary Counsel, AMP Building, 80 Collins Street, Hobart. Tel. 30 8011 Parliamentary Counsel: J. Smith
- Parliament, State, Murray Street, Hobart. Tel. 30 8011 Clerk of Legislative Council: A. J. Shaw Clerk of House of Assembly: P. T. Mackay
- Police Department, 80 Elizabeth Street, Hobart. Tel. 38 1101 Commissioner: M. J. Robinson, QPM
- Premier's Department, Executive Building, Franklin Square, Hobart. Tel. 30 8011 Secretary: J. O. Green
- Public Service Arbitrator, Reserve Bank Building, 111 Macquarie Street, Hobart. Tel 30 8011

  Arbitrator: Vacant
- Public Service Board Department, TGIO Building, 144 Macquarie Street, Hobart. Tel. 30 8011 Chairman: A. M. Cornish
- Public Trust Office, 446 Elizabeth Street, Hobart. Tel. 30 8011 Public Trustee: W. D. Craig
- Rivers and Water Supply Commission, Marine Board Building, 1 Franklin Wharf, Hobart. Tel. 30 8033 Chairman: D. G. Schaffner
- Royal Tasmanian Botanical Gardens, Queen's Domain, Hobart. Tel. 34 6349 Superintendent: A. P. May
- State Emergency Service, 83 Melville Street, Hobart. Tel. 30 8011
  Acting Deputy Director: J. Paul
- State Library of Tasmania, 91 Murray Street, Hobart. Tel. 30 8033 State Librarian: L. W. Brown
- Supply and Tender Department, Castray Esplanade, Hobart. Tel. 30 8033 Manager: D. D. Wallace
- Tasmanian Development Authority, 134 Macquarie Street, Hobart. Tel. 30 8022 Managing Director: T. J. Chandler
- Tasmanian Fire Service, 79 Melville Street, Hobart. Tel. 30 8033 Commissioner: J. D. Stewart
- Tasmanian Government Insurance Office, 144-148 Macquarie Street, Hobart. Tel. 30 8011 General Manager: A. L. Eiszele
- Tasmanian Museum and Art Gallery, 5 Argyle Street, Hobart. Tel. 23 2696 Director: D. R. Gregg
- Tasmanian Racing Directorate, Public Building, St John Street, Launceston. Tel. 003 32 2450 Director: K. Pearce
- Totalizator Agency Board, 28 Davey Street, Hobart. Tel. 34 7744 Chairman: L. N. P. Cox
- Tourism, Department of, Marine Board Building, 1 Franklin Wharf, Hobart. Tel. 30 8011 Director: G. J. Dean
- Town and Country Planning Commission, 30 Davey Street, Hobart. Tel. 30 8011 Commissioner: K. Tyler
- Transport Tasmania, 1 Collins Street, Hobart. Tel. 38 9201 Commissioner: R. W. J. Morris

## State Government Departments and Officials (a)—continued

Treasury Department, Treasury Building, Murray Street, Hobart. Tel. 30 8011 Under Treasurer: I. G. Inglis

University of Tasmania, 301 Sandy Bay Road, Sandy Bay. Tel. 20 2101 Vice Chancellor: Professor A. Lazenby

(a) As at 18 September 1984.

NOTE: All principal offices shown above are located in the 002 STD area unless otherwise indicated.

## Overseas Representation in Tasmania

Belgian Royal Consulate, 91 Collins Street, Hobart 7000.

Finnish Consulate, 103 Melville Street, Hobart 7000.

French Hon Consulate, 728 Sandy Bay Road, Sandy Bay 7005.

German Federal Republic Consulate, 348 Sandy Bay Road, Sandy Bay 7005. Greek Consulate, 37b Derwentwater Avenue, Sandy Bay 7005.

Italian Republic Consulate, 108a Collins Street, Hobart 7000.

Japanese Consulate-General, 60 Liverpool Street, Hobart 7000.

Dutch Consulate, 62 Rosny Esplanade, Rosny 7018.

Royal Danish Consulate, 341 Elizabeth Street, North Hobart 7002.

Royal Norwegian Consulate, 60 Liverpool Street, Hobart 7000.

Swedish Royal Consulate, 164 Campbell Street, Hobart 7000.

Swiss Consular Agency, 1 Cedar Court, Sandy Bay 7005.

#### ACTS OF STATE PARLIAMENT

## Summary of State Acts, 1983

The examples below illustrate the interpretation of the notations used in the following list of Acts:

- (A 1952)—An Act to amend an Act of the same title passed in 1952.
- (A Audit Act 1952)—An Act to amend an Act of this title passed in 1952.
- (R 1952)—An Act to repeal an Act of the same title passed in 1952.
- (R Audit Act 1952)—An Act to repeal an Act of this title passed in 1952.
- (P 1952)—An Act to be incorporated and to be read as one with the Principal Act passed in 1952. (P Audit Act 1952)—An Act to be incorporated and to be read as one with the Principal
- Act of this title passed in 1952. (RS 1952)—An Act to repeal an Act of the same title passed in 1952 and to substitute new
- legislation. (RS Audit Act 1952)—An Act to repeal an Act of this title passed in 1952 and to substitute

Where an Act amends an earlier Act or is to be incorporated and reads as one with the Principal Act, the year quoted in brackets (e.g. A 1952) refers to the year in which the Principal Act was passed; all subsequent amendments are inferred.

new legislation.

#### State Acts, 1983

Act no.	Short title	Summary		
1	Ambulance Service Amendment (A1982)	Makes transitional provisions pending arrangements for main 1982 Act.		
2	Employment (Stabilization of Remuneration)	Freezes wages until 31 December 1983.		
3	Industrial Relations Amendment (A1975)	Directs Industrial Boards to consider the economy before making awards.		
4	Industrial Relations Amendment (No. 2) (A1975)	Gives the Minister for Industrial Relations the right to intervene in matters before Industrial Boards.		
5	Loan Fund Supply	Application of Loan Funds for year to 30 June 1984.		

## State Acts, 1983—continued

Act no.	Short title	Summary		
6	Consolidated Revenue Fund Supply	Application of funds from Consolidated Revenue for year to 30 June 1984.		
7	Public Works Committee Amendment (A1914)	Increases minimum amount to be referred to Committee; directs that works above minimum cannot begin until Committee reports.		
8	Superannuation Amendment (A1938)	The Fund Board must now pay its administration expenses to Treasury.		
9	Traffic Amendment (R part of 1925)	Omits certain regulations from main Act.		
10	Loan Fund Appropriation (No. 2)	Issue and application of funds for year to 30 June 1983.		
11	Stock Amendment (A1932)	Exempts imported oxen from quarantine and revises the definition of 'ovum'.		
12	Retirement Benefits Amendment (A1982)	The Fund Board must now pay its administration expenses to Treasury. The entitlement of certain police officers is altered.		
13	Solicitor-General	Provides for the appointment and conditions of service of a Solicitor-General.		
14	Statutory Salaries (A1979)	Provides for a salary for the Solicitor-General. (See Act 13 above).		
15	Forestry Amendment (A1954)	Amends conditions of special pulp-wood licence.		
16	Local Government (Indemnity of Councillors)	Indemnifies Tamar Valley councillors over expenditure on reorganization.		
17	Midway Point Improvement (Doubts Removal)	Concerns street works and drainage at Midway Point.		
18	Transport Amendment (A1981)	Creates a cab and hire car trust fund.		
19	Traffic Amendment (Public Vehicles) (A1925)	General amendments to licence conditions.		
20	Metropolitan Water Amendment (A1961)	Hobart and surrounding areas are to be revalued every three years.		
21	Parliamentary Salaries and Allowances (A1973)	Lays down conditions for reviews of Parliamentary salaries.		
22	Fire Service Amendment (A1979)	Concerns fire officers, and action on fire hazards.		
23	Stamp Duties Amendment (A1931)	Changes scales of duty, exempts some instruments		
24	Housing and Construction (Repeal) (R1977)	Abolishes the Department.		
25	Industrial Development Amendment (A1954)	Alters the powers of the Minister.		
26	Administration and Probate Amendment (A1935)	Alters rights of court actions.		
27	Legal Practitioners' Amendment (A1959)	Reduces apprenticeship-at-law from 18 to 12 months.		
28	Closer Settlement Amendment (A1957)	Concerns rent payable on leases.		
29	Noxious Weeds Amendment (A1964)	Concerns predators and parasites of weeds, inspections; prohibits certain imports.		
30	Local Government (Highways) Amendment (A1982)	Relates to parking tickets.		
31	North Esk Regional Water Amendment (A1960)	Concerns local government debts to Water Commission.		
32	Bills of Sale Amendment (A1900)	Lodgment of bills of sale, objections, power of Court.		
33	Arbitration Amendment (A1892)	Costing of arbitration actions.		
34	Electoral Amendment (A1907)	Form of nomination for parliamentary candidates		
35	Savings Banks Amendment (A1848)	Increases maximum payable to estates.		
36	Constitution Amendment (A1934)	Voters must be Australian citizens.		
37	Medical Amendment (A1959)	Companies providing medical services; discipline; medical titles.		
38 39	Sewers and Drains Amendment (A1954) Stamp Duties Amendment (No. 2) (A1931)	Relates to prescribed areas. Stamp duty on lucky envelopes.		

## State Acts, 1983—continued

Act no.	Short title	Summary		
40	Racing and Gaming Amendment	General amendments.		
	(A1952)			
41	Wrest Point Casino Licence and Development Amendment (A1968)	Increases maximum of government loans.		
42	West Coast Public Hospitals Board Validation	Validates past actions and Boards.		
43	Associations Incorporation Amendment (A1964)	Fees for incorporation of an association.		
44	Hydro-Electric Commission (Power Development)	Describes the King River development.		
45	Justices Amendment (A1959)	Justices may exercise certain powers; failure to pa		
46	Public Health Amendment (A1962)	Delegation of power to municipal health inspector		
47	Local Courts Amendment (A1896)	Court costs.		
48	Hydro-Electric Commission (Power Development Amendment) (A1967)	Ratifies cost increases.		
49	Ambulance Service Amendment (No. 2) (A1982)	Payment for services to be made by municipalities		
50	Public Servants Retiring and Death Allowances Amendment (A1925)	Rights of contributors; early retirement.		
51	Nurses Registration Amendment (A1952) (R1947)	Enrolment of mothercraft nurses; repeals 1947 Ac		
52	Consolidated Revenue Fund	Issue and application of funds from Consolidated		
	Appropriation	Revenue till 30 June 1984.		
53	Loan Fund Appropriation	Issue and application of funds till 30 June 1984.		
54	Hospitals Amendment (A1918)	Constitution of Boards; appointment of chief executive officers.		
55	Cremation Amendment (A1934)	Cremation fees.		
56	Licensing Amendment (A1976)	Amendment of fees.		
57	Pay-Roll Tax Amendment (A1971)	Rebates of pay-roll tax; deduction for small businesses.		
58	Tobacco Business Franchise Licenses Amendment (A1980)	Increases licence fees.		
59	Consolidated Revenue Fund Supplementary Appropriation	Appropriation of a further sum from consolidated revenue to 30 June 1983.		
60	Land and Income Taxation Amendment (A1910)	Rural land parcels.		
61	Fire Service Amendment (No. 2) (A1979)	Contributions payable by municipalities; fixing of rates.		
52	Parliamentary Superannuation (Special Provision)	Payment by the Treasurer into the Fund.		
63	First Home Assistance Amendment (A1982)	Restricts the definition of eligible persons.		
54	Statutory Salaries (No. 2) (A1979)	Rates of salary for magistrates.		
55	Industrial Relations Amendment (No. 3) (A1975)	Proxies of representative members.		
56	Commercial and Inquiry Agents Amendment (A1974)	Duration of licences.		
57	Parole Orders (Transfer)	Reciprocal parole orders between States; transfer of parole orders.		
58	Arbitration Amendment (A1892)	Costing of arbitration actions.		
59	Motor Vehicles Taxation Amendment (A1981)	Taxation on certain motor vehicles, trailers.		
70	Local Government Reorganization (Tamar Valley) (Poll)	Polling of municipal electors of the Tamar Valley for local government reorganization.		
71	Stamp Duties Amendment (No. 3) (A1931, A1981)	General amendments.		
72	Land Tax	Scales of land tax for 1983-84.		

#### State Acts, 1983-continued

Act no.	Short title	Summary
73	Plumbers' Registration Amendment (A1951)	Registration of plumbers; change of name of Board.
74	Public Service Amendment (A1973)	Governor's power to constitute Departments.  Validation of previous actions by heads of departments.
75	Justices' Amendment (No. 2) (A1959)	Summary trial for petty crimes.
76	Archives	Preservation of the State archives; responsibilities and powers of the archivist.
77	Criminal Code Amendment (A14 Geo V 69)	Aiding and abetting criminals; admission to bail.
78	Police Regulation Amendment (A1898)	Special constables. Fund managed by Board.
79	Local Courts Amendment (No. 2) (A1896)	Court jurisdiction.
80	Firearms Amendment (A1932)	Further interpretations.
81	Gaming (P1952)	The Gaming Act.
82	Tasmanian Trotting Control Board Amendment (A1976)	Changes 'Trotting Control' to 'Harness Racing'.
83	Racing and Gaming Amendment (No. 2) (A1952)	General amendments.
84	Tasmanian Development	Establishes the Tasmanian Development Authority.
85	Retirement Benefits Amendment (No. 2) (A1982)	Constitution of the Trust, conversion of pensions to lump sums.
86	Stamp Duties Amendment (No. 4) (A1931)	Credit card duty; debits duty.
87	Racing (P1952)	The Racing Act.
88	Tasmanian Development (Miscellaneous Provisions)	Amendments to other Acts consequent on Act 84 above.
89	Launceston Corporation Amendment (A1963)	Deposit of money in special accounts.
90	Hobart Corporation (A1963)	Election of Mayor; retirement of Aldermen; expenditure.
91	Local Government Amendment (Administrative Amendments ) (A1962)	General amendments.
92	Hydro-Electric Commission Amendment (A1944)	Government control of the HEC.

### FROM QUILL TO KEYBOARD:

# Tasmanian Government Administration in Transition — 1985

by R J K Chapman, Senior Lecturer in Administration, Department of Political Science, University of Tasmania.

### Introduction

There is a world of difference between the simple, stable ambience of past decades and the complex, turbulent environment that is likely to persist into the future. It is as exactly disparate as the distinction between the two tools of clerical trade—the quill and the keyboard. No decision today can be made in total isolation, without taking account of the multitude of variables involved. Governing requires a far greater grasp of those variables, that complexity, than was possible with record-keeping techniques of the past. Government administration must be able to utilise the newest techniques for accomplishing the task. It cannot assume that those who govern can be left alone to deal with the issues while government administration is merely the instrument of the politicians' directions.

This essay offers a prospect for the next decade of government administration in Tasmania. In order to understand what is required it is necessary to start with a broad review of the contemporary operations of the system. This has already been done very adequately in 1981 by the Cartland Report, which is used as the starting point. The condition of the Tasmanian government administration related by the Report seems more appropriate to the early part of this century than the present. Traditional, narrowly procedural and technical perspectives dominated departmental thinking and hindered rather than helped the government of the day. The organisational culture in Tasmania, as in many other Australian States was, until the 1980s, rooted in a past age.

Cartland's finding and his recommendations to bring about the transformation of the administration were sufficiently dramatic to be the catalyst for change. The second section of the essay surveys some of the most significant of the proposals made in the Report. Implementation of these would increase the capacity of the administration to be adaptable and flexible in an age when those two features are prerequisites for good government. The responses to major environmental pressures and technological change must be rapid enough to ensure governing is possible. Information sharing, consultation, coordination and, above all, the ability to provide policy advice for governments are all qualities needed for effective operations. These were the principles on which the Report based its recommendations. The extent to which those proposals are being implemented will be discussed in this section remembering that 1985 is a transitional period. The State Service Act 1984 will only come into force sometime in 1985, although some structural reorganisation will have taken place before then.

In the final section some comments will be made on the likely outcome once the transition has been made and some of the more specific recommendations take root. It is also necessary to try to delineate both what the recommendations had intended to bring about in terms of change and what might eventuate given the constraints that exist and are likely to persist. No mutation occurs in a vaccum, it must work on and through occupants of organisations who may or may not be permeable to new ideas. By the last decade of the century the nature of the administration must be wholly revitalised to meet the demands that the turbulent environment places upon it. Without such a transformation Tasmanian Governments will suffer considerable disadvantages compared to those of other Australian States which are now well into the reorganisation process.

#### **Tasmanian Government Administration in 1981**

Managerial capacity, sound policy advice and formulation need to be nourished and stimulated in government administration as well as technical competence to undertake the task. Organisations which make no such effort will regress. They become stagnant, unable to respond to the fluctuations of values and political expectations because they are limited in their administrative responses.

This was the situation found by Sir George Cartland in the review of Tasmanian Government Administration which he conducted as a single commissioner between June 1980 and November 1981. The review was mainly concerned with improving the quality of government administration in the field of policy advice and formulation of policies for the government and managerial competence. As he points out,

'When an independent review of a service has not taken place for over seventy years, when those years have been characterised by enormous changes in the responsibilities of modern governments, and when there has been no effective machinery for continuous planning and adjustment of the government machine during that time, it is inevitable that much more than a superficial review of the Service is required and that a number of fundamental issues will need examination'.<sup>2</sup>

Initially, however, it is necessary, as it was for Cartland, to identify what comprises Tasmanian government administration. To deal solely with the public service as defined by the *Public Service Act* would limit the extent of the survey, since those officials form less than one quarter of government employees. In Tasmania that definition omits large numbers of employees paid from the public purse, such as school teachers, police, hospital

professional staff including nurses, and prison officials. A much wider definition of employees in government administration is needed.

Unfortunately there is no adequate definition provided by Cartland or anyone else, because no one single body has ever had responsibility for supervising all public employment. No one has collected the figures of total employment from the public purse. The best that could be done for the Cartland investigation was to use figures kept by the Treasury from which it appeared that in June 1980 there were 40 153 persons employed either full-time or part-time in the major agencies of government. This figure did not take into account 'the smaller semi-governmental or quasi-governmental agencies.'3 Employment on this base can be compared across a number of years as shown in the following graph. It shows that Tasmania's government workforce amounts to one in 10 of all citizens or one in four of the workforce. It is a significant total for a small State and is obviously a force to be reckoned with through its unions.

These employees and those unaccounted for in semi- or quasi-governmental agencies, such as the marketing or regulatory boards, e.g. Egg Marketing Board or Plumbers Registration Board, are spread throughout a complex organisational structure. The Cartland Report mentions the existence of 253 government funded statutory bodies which were subject to audit by the Auditor-General at July 1980. There are undoubtedly many more but no official sources exist to provide an accurate figure. The following table is an attempt to use information from the Tasmanian Government Directory, a publication that was produced irregularly by the Premier's Department from 1972.4

Public Organisational Arrangements, Tasmania 1968-1982				
Organisation	1968	1973	1976	1982(a)
Ministerial departments	11	15	15	14
Departmental offices	15	15	15	12
Departmental corporations	8	9	11	(b)9
Public corporations	14	13	13	21
Regulatory bodies	17	23	27	45
Satellite bodies	91	114	126	85
Total	156	189	207	186

Treasury figures are based on a threefold classification system and are shown below for 1978, 1980 and 1984. These figures do not include the majority of the regulatory and statutory bodies shown in the previous table. It will be noted that these bodies are an area of greatest overall growth over recent years and their omission does not seem to be based on any sound managerial reason.5

Public Organisations a	as Defined by	Treasury Blue	Book
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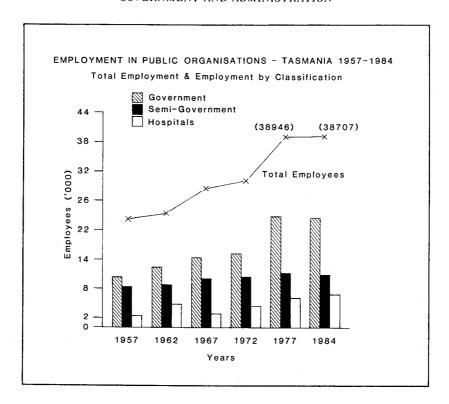
Organisation	1978	1980(a)	1984
Departments (b)	29	32	35
Departments (b)	30	26	29
Public hospitals and others	24	24	22
Total	83	82	86

<sup>(</sup>a) Taken from Report, I, B1.6.6., p. 37.

<sup>(</sup>a) Taken from the Public Service Board publication which was issued as a replacement for the Government Directory. This may account for the discrepancy in the last two figures given for Regulatory and Satellite bodies.

<sup>(</sup>b) Includes all hospital boards as one.

<sup>(</sup>b) This figure does not agree with the Public Service Board total. They actually show 29 departments in 1984 and in addition their list contains 5 semi-government authorities as departments, so some 10 or 11 departments are classified as such by Treasury but not the Public Service Board.



The confusion caused by problems of definition, as well as the ignorance of successive governments of exactly the resources they have at their disposal, illustrate vividly the findings in the Cartland Report. The first set of findings to which reference will be made relate to the government administration as a whole, while the second involve the central authorities, Premier's Department (PD), Treasury and Public Service Board (PSB).

### Government Administration—Public Sector Organisation

Cartland found that fragmentation and departmentalism were rife within the public sector. Government administration was out of hand because no one knew the whole picture.

'The existence of many, often small and often uneconomic units of organisation, each requiring to varying degrees the basic human, financial, legislative and administrative resources necessary for self sufficiency, creates an intense competition for resources. Decision making by Government on the distribution of limited resources becomes more difficult and sometimes arbitrary and wasteful. The potential for overlap and duplication of function, costs, operations and resources is considerable. Moreover, there is considerable waste of effort in framing separate regulations governing the terms and conditions of employment for these various authorities and in providing for their administration. Rationalisation of management and administration of the total workforce is necessary and would be more economical and effective than the present fragmented arrangements'.6

The Report goes on to add that fragmentation produces communication problems and therefore limits the opportunities for coordination. Particular concern is expressed about the industrial effect of fragmentation which is seen as preventing mobility of personnel between instrumentalities, whether for promotion or because of government decisions on better use of human resources.

'Finally, and perhaps of greatest importance, the Government is prevented by the fragmentation of statutory employment powers from flexible and coordinated management of its most valuable and costly resource, namely its workforce'.

Departmentalism has been one of the major pressures producing this fragmentation. Cartland suggests that it orginated from the colonial legacy of technical, specialist or professional departments which were oriented to problem solution and service provision rather than policy formulation. One consequence has been to ingrain an hierarchical structure, guided by an inward-looking and narrowly specialist perspective so that vertical differentiation became more important than wider issues of the social, political and economic environment.

'The traditional hierarchical structure of departments tends to identify the head of department as the only person who can speak for the department and any phase of its activities. It is characterised by a rigidity and lack of flexibility in its management functions. This is manifested in a system of rigidly fixed duties or positions, a multiplicity of narrow job classifications and gradings, and overspecialisation of duties'.\*

This characteristic produces a lack of professionalism in administration and management preventing officials seeing themselves 'as an integral part of the whole department or in the widest sense, as part of the complete government machine.'9

A major defect of the system is lack of consultation and coordination both within and between the departments.

It is seen frequently at the level of delivery of services where there is a failure to consult and coordinate effort over individual cases; at the level of problem solving and planning; in the area of the provision of managerial information and in the development of policy proposals for Ministerial or Cabinet consideration. There is a marked lack of appreciation of the need to inform and consult to such an extent that it constitutes in itself one of the fundamental obstacles to the efficient operation of the administration.<sup>10</sup>

### Central Authorities

In any governmental system there are three agencies which provide the government of the day with the means of coordination and control of the whole administration. These are the Treasury, traditionally accepted central body from earliest times which deals with financial aspects of government administration. More recently there emerged the central personnel agency, the Public Service Board, with the task of manpower control, through recruitment, promotion, classification and other personnel management activities. The PSB was also intended to reinforce the protection of the merit principle since their task was to select, appoint and promote rather than leave this to political patronage. Finally, and latest on the scene, has been the Premier's Department. Originally wholly concerned with protocol matters and some minor assistance to the Premier of the day, PD now takes on a major policy role. It is here that the Cabinet Division has been located providing a comprehensive picture to Premier and Cabinet when dealing with submissions. Departmental submissions must proceed through much closer scrutiny before being presented to Cabinet than before and the opportunity is provided for the effect on other areas of governmental activity to be tested first.

Cartland found that these agencies in Tasmania had not been operating differently from the 'line' departments.

'The nature of their problem is fundamentally the same as in other departments, but varies in detail. They all have in the past operated on too narrow a front and have lacked the broad vision from which should flow the leadership they could and ought to give other departments and agencies'."

The Report noted that PD 'concerned itself too much with procedures, protocol and general routine'; Treasury was limited to 'traditional budgeting and information procedures'; and inspectorial and regulatory roles had caused it to ignore other more vital work it was empowered to undertake.

In sum, the Cartland Report found that the Tasmanian government administration at the time of publication in November 1981 lacked efficiency, economy and effectiveness. It was not operating according to any of these criteria. The only quality it possessed in too great a measure was continuity and this had become a deficiency in that it meant perpetuation of departmental differences and concentration on procedural issues. None of these criticisms were meant to denigrate the obvious dedication and technical competence that did exist in the Tasmanian government administration. The concern expressed in Cartland was that this was not being properly directed nor utilised effectively.

### Ministerial Responsibility

There was also an important additional factor which the Report addressed regarding political control and the overall management of the public sector. Cartland restated the view that political leadership by ministers was of the essence of governing. However this collective responsibility was not being fulfilled and, in addition, accountability for it was not satisfied because of the fragmentation of the administrative arrangements. As matters stood, Tasmanian Ministers were unable to undertake their proper responsibilities satisfactorily. There were too many competing calls on their time, some Ministers in recent times having had between four and five departments to control.

The Report calls on governments to re-affirm quite unconditionally the pre-eminent responsibility of Ministers to answer to Parliament and the community for the effectiveness, efficiency and economy of individual departments and agencies. This also extends to the multiplicity of statutory authorities that have been created outside the framework of the *Public Service Act*. The Report characterises the present situation as one in which the quality, role perceptions and practices of Ministers and senior public servants have created a leadership vacuum.

## **Small Scale Administration**

The broad range of problems noted above are described in the Report as causing the major defects in the quality of Tasmanian government administration. They are not unique to Tasmania, many of the other States have had equally critical investigations. The one feature that is significantly more of a problem in Tasmania is the extent of fragmentation when taken with the relatively small scale of the administration. While the functions and duties undertaken by public organisations in Tasmania are no less than those of the other States, it can be assumed that the amount of work generated will be of a different order.

This means that insofar as the administrative organisation matches the range of responsibilities, as in other States (sic), many of the departments and agencies in Tasmania must necessarily be extremely small or not economically or organisationally wholly effective . . . The small scale of responsibilities which require administration by the Tasmanian Government undoubtedly is one of the environmental factors which predisposes the administration to fragmentation and its attendant problems. 12

It is against these background findings that Cartland made his recommendations. His Report was made in two Instalments (September 1981 and November 1981). The more significant proposals are made in the First Instalment which deals with overall management of the public sector. The Second Instalment is directly concerned with the proposals for policy formation and improved management, concerning itself with some detailed recommendations for the reorganised service. The next section of this essay deals with the recommendations that have so far been adopted in legislative form in the *State Service Act* 1984, as well as other matters that have also been the subject of government decision.

#### The Cartland Recommendations

The Report makes two major recommendations which are intended to create a government administration in Tasmania capable of providing a better quality of policy advice and an improved managerial competence. They are also intended to allow Ministers to take control of their resources and fill the political leadership vacuum. The first is to create a single Crown Service, the second to shift the emphasis of the departments away from provision of service and solutions of problems to policy analysis and formulation.

### The Single Crown Service

Combining all government departments and agencies that existed as at the time of the Report into a single Crown Service would form the basis of a 'cohesive, coordinated management system which could replace the present fragmented and partly uncoordinated system of government administration'. Such a service would be based on recruitment, appointment and promotion in accordance with the merit principle. This would extend the existing situation in respect of the *Public Service Act* employees to all others being brought into the Crown Service (as noted previously almost three quarters of the total).

'It is proposed that the Government should affirm that selection, appointments, promotions and other staffing processes for persons in or seeking employment in a department or other agency of government should be based on the merit principle. It follows that action should be taken to devise merit based systems and to interpret the merit philosophy in ways which are appropriate to the differing needs of different parts of government service. . . . For this purpose, processes such as selection, appointment or promotion which affect the individual should fall within the purview of an independent statutory authority responsible for Parliament and free from any other responsibilities to government which might appear to compromise its status.'14

The recommendation to accomplish this formula was to appoint a Commissioner for Public Employment.

Creating a Crown Service for the total government workforce was to proceed concurrently with rationalisation of the organisational arrangements so that there eventually might only be the same number of departments and agencies with a permanent head as there were Ministers (in Tasmania between eight and ten).

Cartland believed that there would be a considerable improvement in meeting the needs of Ministers if they had homogeneous portfolios each built around a common theme, e.g. Primary Industry, Land, or Law and Order. Such a proposal would also assist the location of responsibility and authority so as to make clear the line of accountability, although Cartland maintains its major benefit would be in the contribution it would make to the integration of policy formulation and processing. Advice to governments on these matters would come from the office of Public Administration located in the PD.

These proposals represent the primary concern of Cartland to reinforce the Westminster System of parliamentary representative government. His focus is on the central role of Ministers and their senior advisers in providing direction for the whole government administration. For this task to be performed adequately in the more complex world at the end of the twentieth century, there needs to be a deliberate distancing of these major actors from the day to day operations.

These underlying principles were enunciated with some force by the Report and, in announcing how the government proposed to implement them, the Premier (Mr Gray, Liberal) committed his government to their acceptance. He also stated that there would be a single Crown Service and that the Public Service Board would be abolished as proposed by Cartland to be replaced by a Commissioner for Public Employment, a Department of Public Administration, a Commissioner for Review of Administrative Decisions and an Office of Industrial Relations. A Cabinet sub-committee would give detailed consideration to other aspects of the Report, especially rationalisation of the organisation structure.<sup>15</sup>

Royal Assent was given to the State Service Act 1984 on 30 May 1984. Its provisions were intended to fulfil the commitment 'to give governments the flexibility they need to meet the changing circumstances and modern management practices'. The Bill contained three major elements:

• unification of State administration under a single Crown Service directly

controlled by the government;

delegation of organisational and managerial functions to Heads of agencies and a clarification of their pre-eminent responsibility for the operations and personnel under their control; and

protection of the rights of individual employees through the enforcement of appointment by merit protected by the Commissioner for Public Employment and the grievance procedures to the Commissioner for Review. Both the Commissioners being Parliamentary Officers and not part of the State Service.

The Act provided for the abolition of the PSB and its replacement by the Department of Public Administration with its own Minister. The functions of the Department Secretary are:

- to advise and monitor policy on staffing, administration and operation of the State Service:
- to coordinate the management practices and procedures with uniform standards in administrative and personnel matters;
- to assist Heads of agencies in all management and personnel aspects and to provide standards for their guidance;
- to develop and coordinate training, education and development programs;
- to maintain records:

and a number of other miscellaneous activities.

One of the innovative measures is the use of what are called Employment Instructions and Administrative Instructions. The former may be issued by the Commissioner for Public Employment in his role as sole employing authority for the State Service. Employment Instructions may relate to practices and procedures in respect to selection, recruitment, appointment, promotion, transfer, secondment, redeployment and discipline, or the creation and abolition of positions. Administrative Instructions are issued by the Minister of Public Administration on any matter which relates to the State Service and which is not repugnant to or inconsistent with the provisions of the Act. Effectively this allows the Minister an absolute control over such matters as creation, reorganisation and abolition of department; general employment levels or specific numbers of persons to be employed in agencies; although not over matters for which the Commissioner has jurisdiction. There are provisions for secondment or redeployment of staff, including the right of Heads to declare a person surplus to requirements and available for redeployment. The Commissioner will also have an 'unattached list' for such people and others with specific appointments who will have their rights protected until they are found another position. The Head of the Agency also has the right to declare a person unfit to discharge his duties and require the Commissioner of Public Employment to conduct an inquiry during which the officer may be suspended from duty. All of these provisions are subject to appeal to the Commissioner for Review who is also under an obligation to ensure that the merit principle is upheld throughout the State Service.

The Act was not proclaimed at the time of the Assent since there were many other statutes, regulations and other cognate legislative provisions that had to be amended. The consequential legislative program was in fact far more onerous than at first appeared. The original expectation was that the proclamation date would be 1 January 1985 but it was then put back to April and at the time of writing, now appears that it will be not before June.

There is little doubt that the comprehensiveness of the Act will be of great importance in shaping the future of the Tasmanian government administration.

As Premier Gray said in his Second Reading Speech,

'The Government believes the Bill offers the State a more streamlined, capable and responsive public sector service and will offer State employees the benefits of wider career mobility and greater professional development opportunities.'16

## **Building Policy Making Capacity**

The Report placed great emphasis on the formation of the Crown Service in order to give governments the ability to concentrate on providing 'more inspired leadership and more imaginative administration of an improved Public Service'.<sup>17</sup>

It argues that the role of policy making is the major one for Ministers and their senior advisers. It defines as Policy,

... any decision which prescribes an end to be pursued or a means by which it shall be pursued. Policy matters would include issues requiring decision in principle; issues of grave or outstanding public importance; issues which have a political flavour in them; and finally, issues on which ministers feel the need to develop a policy'.\(^{18}\)

## Ministers and Heads of Departments

Ministers and their senior advisers have the responsibility for making these kinds of decisions because they have the task of giving direction to the whole administration. They have to fulfil their other tasks bearing this responsibility in mind. Their multiple activities have to be balanced one against the other. Ministers are not only members of Cabinet and the executive arm of government responsible for their departments and agencies; they are also political representatives of their constitutents and they are members of parliament.

Heads of departments are policy advisers, policy formulators and departmental managers. The opportunity for increasing the capacity for policy advice and formulation according to Cartland lay with the heads of departments and increasing the policy resources available to them. It requires deliberate effort to 'build around [them] a structure for processing material for policy and decision making at the departmental level.' Cartland suggests interdepartmental committees or regular meetings of key officers would be an initial step in the emergence of policy processing strengths. Opportunities for the establishment of planning and research units or officers with these tasks should be provided in departments but these would not readily arise with departments so small and fragmented.

At the same time the dominance of relatively narrow technical expertise both in departmental functional purpose and as represented in the qualifications of the senior staff needs to be redressed. It must be balanced by a greater emphasis on managerial and policy analytic qualities which will be reinforced by the proposal to use a different criterion for staff selection. Current legislation protects merit through the notion of 'relative efficiency' as a measure for appointment and promotion. The Report argues that this criterion places a heavy emphasis on ability to do the job and the components of the duty statement. It limits the perception of the task to be performed and as a result, limits appointment of those with an aptitude for extension or development as potential managers. The report recommends that in future the criterion should be 'superior capacity'. This criterion would involve a demonstration of general capability, qualifications and experience which would enable the candidate to be successful in any job of the particular class for which he or she is seeking employment.<sup>20</sup>

Heads of departments must take the initiative in bringing these changes about since there are no other sources from which it could come. They must accept that the tasks in the department encompass a much wider range than just the specialist activity of the operation. Cartland argues, There are two aspects of organisational operation in which Heads will have authority and responsibility. These are the development of policy objectives through the formulation of policy advice for Ministers, and the achievement of settled policy objectives through executive action on behalf of the Minister. In both of these fields Heads must be accountable for the effective, efficient and economical management of resources allocated to them in recognition of the priority accorded to their policy objectives by the Government.<sup>21</sup>

# Central Agency Role

For this situation to become more commonplace within the new State Service it will be necessary to permit the head to enter fully into his new obligations and limit the role of constraining pressures, such as central agencies. At the same time, and apparently much harder to achieve, heads of departments must commit themselves to take these obligations seriously. Too often in the past when faced with similar proposals they have resisted any transfer of real authority, preferring to accept, however reluctantly, interference from the Treasury. There have already been moves to increase the delegations of personnel management functions once the Government accepted the Report. However, heads were unwilling to assume that authority even to protect establishments and personnel ceilings. To ensure that these changes are fully accomplished the Department of Public Administration will need the full backing of the Premier of the day. Without it, the likelihood of a 'revisionism' is diminished because there is no one readily available to take back these responsibilities.

At the same time recent decisions by the Government to encourage departments to form program budgets and to create corporate plans and structures will reinforce the pressure on departments and their heads to take more responsibility for their own decisions. A number of departments like Agriculture, Mines, and Premier's have already prepared or are preparing corporate plans. The Treasury has required all departments to provide their estimates in program budget format as well as line item. There are currently moves afoot to change the *Audit Act* to remove the line item requirement so that all future estimates and budget accounts need be presented in program budgeting form only.

For many departments these demands have made them formulate their objectives in written form for the first time. Fitting their programs into such objectives and applying personnel and financial criteria to measure their effectiveness has been a catalyst which will assist the accomplishment of the recommended changes in Cartland. The major problem at this transitional time is that personnel arrangements in the departments are not aligned with these demands. Very few departments have units or even officials whose task it is to deal with such matters. In many cases technical officers without any previous management training or policy exposure have been detailed by reluctant and sometimes indifferent heads to 'keep up to date with these demands of Treasury or the Public Service Board'. This task has frequently been added to their already existing line duties. As often happens in such periods of change without any prior preparation, the results are very patchy and have not easily taken root.

The replacement of PSB and the strengthening of PD were both part of the Cartland 'package' to build up the central agencies' capacity to ensure greater policy-relevant activity. These proposals should help Ministers and heads of departments to place their own particular concerns in a larger context. Cartland expected that the initiatives resulting from these augmented functions would also permeate the system and break down the current departmentalism.

#### **Treasury**

The Report dealt only in an indirect way with the other agency of the central triumvirate—the Treasury. While he devotes some part of his Report to a general critique, Cartland recommended that an independent consultant be appointed to examine Treasury organisation and procedures. The Report draws attention to the 'rather rigid and traditional outlook' of the Treasury and 'some inflexibility of organisation and procedure'. It was also 'a significant feature of the heavily detailed workload of senior officers that there appears to be a lack of adequate delegation within the Treasury organisation'.

The measures to be taken to overcome this state of affairs were left to the independent consultant to devise. As at the date of writing no such consultant has been appointed.

The demands on Treasury officers with the implementation of program budgeting and computerisation of the government accounts has placed an even greater burden on senior officers. It remains to be seen whether, once the effects of these activities have transferred much of the detailed work to departments, the Treasury can become the economic policy adviser the government requires. In the past this activity has been almost wholly derived from the development agencies such as the Division of Industrial Development or the departments responsible for encouraging the utilisation of natural resources such as Forestry, Fisheries and Mines. The creation of the Tasmanian Development Authority to replace Industrial Development and to concentrate the assistance available to entrepreneurs, has also been of great importance in limiting the role of Treasury.

# Premier's Department

The remaining agency in the central triumvirate is the PD, which was the subject of a separate review by Cartland completed in October 1979. Its metamorphosis from protocol and general routine correspondence, to having as its principal concern policy coordination and advice to Cabinet, has been moving rapidly along. The recommendations Cartland made were mainly concerned with setting up a Cabinet Office to handle, check and contribute to proposals coming before Cabinet. The purpose of the Office would be to ensure that those submissions should be better prepared and presented, all documentation completed before submission, and the Cabinet agenda properly drawn up. There was also a secondary, perhaps even more important, step involved and that was to simplant an independent research capacity. The Cabinet Office would have a research section with its own expertise, not to second guess department submissions but to test them in a wider framework of reference. The necessity for consultation with other departments and agencies, central agencies and other affected bodies, is also a very important part of policy formulation. As Cartland points out,

'The Office also has a very important role to play in strengthening the coordination of government policy as a whole and in ensuring that particular proposals are presented in the context of the whole spectrum of government policy. Although I recognise that at present there is a very necessary restriction on any increase of government staff the Cabinet Office is a very important unit in the process of policy formulation; and, in terms of effective return for investment, ought to have a high priority when the government comes to assess its essential role. I recommend a strengthening of the Policy Research Unit.'<sup>23</sup>

These recommendations are those which have been most specifically acted upon to date and there is little doubt that there have been beneficial results. The policy advisory capacity of the PD has been strengthened with the growth in the Cabinet office. There were nine officers in 1980 of whom three were involved in research. There is now a Cabinet Division of 16 of whom ten are research officers. The departments are finding their submissions subject to much more detailed scrutiny. At the end of 1984, with the completion of the Corporate plan, some further reorganisation took place to further reinforce these changes.

The consequential adjustment in approach to the question of policymaking in both departments and agencies and government as a whole has been significant. There is little doubt that these have gone some way to meet the major thrust of the Cartland Report. They have forced Ministers to reconsider their operational style and the allocation of their time and there is a greater tendency for Cabinet to govern rather than manage. Yet this is not to say that there has been a consistent and widely shared understanding of the need for change. There are still great gaps in implementation of the 'Cartland package' that need to be addressed. Similarly, for any observer, it is hard to evaluate the differing degrees to which change is the result of a revitalisation and transformation of the government administration or the political style of the government (and particularly the Premier) of the day. Political leadership is a crucial motivator for any change and the

current Gray Liberal Government wishes to be seen as giving such leadership. The real test of the undoubted improvements in policy formulation and management in Tasmanian government administration will come in the next decade.

#### Tasmanian Government Administration Into The Future

The Cartland Report has served as a reminder of some major principles of the governmental system. Government administration (the public service in its widest sense rather than merely those employees under the Public Service Acts) has a responsibility to implement the policies and programs of the government of the day, within the framework of that government's priorities. The task is expected to be undertaken effectively, that is to say, to achieve the goals as economically and efficiently as possible. Two major functions necessary to undertake these operations are capacity to manage human and material resources and availability of advice on the formulation of policy. When these functions are provided, the politician should be able to give political leadership and direction, and to govern.

Politicians cannot fulfil their political leadership role without the help of the government administration in providing policy advice and formulating alternatives. The final decision is an amalgam of technical information and expertise in departments and political sensitivity about citizen demands and expectations from the politicians. Our parliamentary system operates to support this joint activity creating the distinction between Ministers responsible to Parliament and the people, and public employees responsible to Ministers. It is based on the expectation that while the two roles are complementary they are separable with the permanent officials remaining the 'servant' of the elected politician. Once the decisions have been made by the government it is up to the officials to ensure the best outcomes. Responsibility for implementation rests with the government administrative structure and its effectiveness depends on its managerial competence. It is the quality of this competence which is crucial for the effective accomplishment of the tasks set by governments. There are several elements that contribute to its quality, including the nature of the information systems, the understanding of the roles to be played by the actors in the system, the level of excellence of the officials and the organisational structures within which they carry out their tasks. The aggregation of these contributions should produce good government. The following five attributes characterise good government as expected by the average citizen.

Value for money—where government decisions and directions are undertaken:

- at a cost that is appropriate to the services or goods provided;
- for those citizens to which the government expressly directed the service; and
- in a way which meets the expectations of both the government and intended recipient.

Value for money involves more than just economy and efficiency, it includes accountability and responsibility, therefore responsiveness.

Integrity—the organisations providing the goods or services and the people who work in them should not be solely motivated by the benefits they will individually receive. The link between productivity and personal gain, so prominent in motivating people in private enterprise, should not have a high priority in public organisations.

Competence—having sufficient expertise or general administrative or managerial capacity to undertake the tasks set by government. It also involves providing advice to politicians in power on the feasibility of their proposals and priorities.

Continuity—an organisational memory and customary procedures by which decisions are made so that individuals affected by them and other citizens understand the actions and operations of public employees and the reasons for them. This must be distinguished from bureaucratic inflexibility or procedural emphasis often found in large organisations, although one often readily slides into the other.

Coordination—maximisation of human and material resource available to governments through the management and utilisation of the total system as to achieve

government priorities. This requires flexibility of response, mobility of personnel and complex government information systems.

These attributes should be complemented for the greatest good by strong political leadership based on acceptable policies. Politicians should recognise that their role is to govern not to manage. Governing is an act of clarifying the dominant value system, giving direction through decisions, allocating priorities and resources, and maintaining the whole by balancing competing interests. The political system is structured in such a way that Ministers can be freed from other activity. Implementing decisions and providing public goods and services are the tasks of government administration. Managing those tasks is the role of public employees too, although in a small State such as Tasmania, it is often easy for the Minister to become enmeshed in administrative detail. His responsibility to Parliament includes elimination of mismanagement, but this should not persuade him to become directly involved. His senior officials have that duty and he must ensure they meet their obligations. When government administration is left without political leadership because Ministers are too deeply involved in managing, the whole structure can be left without direction.

Much has been done to remedy past deficiencies in this area. Leadership has been provided through the demands of the Gray Liberal Government for more policy-relevant submissions to Cabinet. Their encouragement for the work of the expanded PD leads the way to showing the rest of government administration what is expected in their approach to the task. The State Service Act and the consequent reorganisation of the PSB should also play a part in raising standards. Further advances will depend on the extent to which there is delegation of authority to heads of departments which is made such a feature in the State Service Act. In a similar way, the initiatives of the Treasury, with the support of the government to introduce program budgeting and computerised accounting and information systems, should have significant effects on the environment in which departments have to operate. Government administration is entering the keyboard age in which opportunities for consultation, coordination and interaction between agencies are inevitable.

Yet there remain whole areas of government administration that have not been exposed to the ferment of changing expectations and ideas. One major writer about administrative reform in Australia, and an early consultant for the Tasmanian Lowe ALP Government which eventually established the Cartland Inquiry, Dr. P. Wilenski, concluded from his experience in the Commonwealth and New South Wales that there are four essential components in transforming government administrations. These are new legislation, new organisations, new procedures and new people. It seems appropriate to summarise the Tasmanian experience to date and its prospects for the future under these four headings.

#### **New Legislation**

Tasmania has new legislation in which is set out the standards for future government administrations. The State Service Act 1984 has the potential to establish a new framework and a new style for both politicians and officials. Not only does it provide the opportunity for the government of the day to control and direct its total workforce, it also allows much greater flexibility in managing for heads of departments. Their role is clarified to a far greater extent than ever before and they can be held much more accountable to the Ministers for their defined responsibilities. There will have to be a much greater emphasis on managerial capacity at the senior levels of the Service and, at the same time, promotion will be subject to notions of 'superior capacity' as merit rather than 'relative efficiency'.

The delegation of personnel management functions to departments, subject to general Employment and Administrative Instructions, should become the norm. It is to be hoped that the Commissioner for Public Employment and the Secretary, Department of Public Administration will make one of their first tasks the issue of such delegations and instructions. They must not duplicate work that is far better entrusted to the managers within the agency.

It is a matter of some concern that not all agencies have been included in the Schedule to the Act thus leaving them outside the State Service, for example the Tasmanian Government Insurance Office and the Hydro Electric Commission. This is especially so with such a large and influential body as the HEC, whose omission was apparently not based on reasons advanced by the Cartland Report. However, the Report, while regarding all government employees as part of a total service, accepted the need to incorporate some of the larger ones in the longer term rather than immediately. The Premier indicated that the omission of the HEC had occurred because:

there would be considerable difficulty in the management of manpower resources by any other body than the HEC;

 the effect on the Commission's statutory responsibilities and its trading obligations would be awkward to manage; and

• there was the problem of how the HEC-related unions would react.

Plausible though this reasoning might be there seems little other than political judgment to base it upon. However there was a commitment to review the situation in 12 months time. Meanwhile the HEC would maintain consultation with the Commissioner for Public Employment.

If the employees are paid in one form or another out of the public purse, whether because they have a monopoly of service given for nothing by the government, or because they receive moneys from taxation revenue to maintain that service, they must surely be part of the government workforce. The Cartland recommendations were made so that it would allow government to utilise the whole of its workforce to fulfil its policies. An agency is not there to ensure its own survival irrespective of government direction. There is a clause in the Act which allows the Governor (i.e. the Cabinet through the Executive Council) to include those agencies not mentioned in the Schedule as well as to remove them. It is to be hoped that future decisions will be inclusive rather than exclusive. Any attempt to use the fact of exclusion of agencies from the original Schedule as a precedent for future exclusions must be strongly resisted. All government administration must remain within the State Services mantle.

#### **New Organisations**

Organisational flexibility, the adaptability and fluidity of organisational arrangements is not ensured through legislation. While the structures, such as the PSB can be altered by statute, there are limits to what can be done in this way. In some situations the newly established structure can just as easily become solidified and unbending as the old. Indeed it is too cumbersome an exercise to depend continually on legislative changes. This must be replaced with a continuous concern within the agencies themselves for self criticism and revitalisation.

Finding suitable operational methods to ensure that there is fluidity and adaptation in organisational arrangements is not easy. Cartland hoped that a revitalised triumvirate of central agencies would create the necessary administrative ethos for the rest to follow, especially if reinforced by concurrently changed ministerial perceptions of their role. There are already signs that this may have been too optimistic. Cartland recognised that such may be the case and his Report did contain at least one major recommendation to overcome this potential difficulty. It was to establish an Administrative Review Committee as a Cabinet Sub-Committee with a small support unit of suitably qualified officials. There would also be an implementation liaison officer appointed in each department to be the communication channel between the Sub-Committee and the agency.

Soon after the election of the Gray Government—which, while still in opposition, had already decided to implement the Cartland Report—the Sub-Committee was established. It comprised the Minister for Public Administration, Mr R. Groom, the Parliamentary Secretary to Cabinet, Mr R. Cornish, and the Premier as Chairman. There was also an officers' committee in support involving the three central agency heads and a group from Cabinet Division to service both. Their first task was to draft the State Service Bill which took some six months. The Report did not envisage this as a major task for the Committee, indeed it saw this Committee as being of more importance once the legislative changes

had been made; supervising and guiding the process of change and evaluating its progress. It remains to be seen whether these other matters will be salient to a Government whose priorities will vary over time.

There are other indications of the difficulty of changing organisations and structures. One of Cartland's strongly expressed hopes was for some rationalisation of the structures thereby reducing the number of departments. Concurrently with the Cartland Inquiry, the government had commissioned an investigation into land use management. Mr Mant, a planning consultant with wide experience in South Australia, New South Wales and the Commonwealth Governments, carried out this investigation. Land use is an area in which the multiplicity of agencies and values make it ideal for such a rationalisation. The work and consequences of the Land Use Management Administrative Review illustrate very clearly the nature of the difficulties that lie ahead in changing structures.<sup>24</sup>

To indicate the range of departments which the Mant Report eventually suggested should merge in the Department of Urban, Regional and Municipal Affairs is to show the nature of the problem. They were Lands, National Parks and Wildlife Service, Environment, Town and Country Planning Commission, Local Government Office and Lands Title Office. Mant made two major findings which reinforced the Cartland comments about fragmentation.

The first, related to the view departments had about their responsibilities and interests, which was to liken them to property—there were clearly identifiable boundaries which other must not cross. This meant that agencies were spending far too much time dealing with each other, protecting their 'patch', rather than identifying and resolving important land management issues. The second point was that, because of the unnecessarily large number of organisations, they were all inadequately staffed, each one derived from a particular part of the overall expertise needed for land use management. The complexity of the issues as they arose was not therefore appreciated in the agencies, and a reasonable balance between conservation and exploitation had not been achieved.

'The essence of the new organisation was to be improved communications between, and a much better use of, all disciplines. Such an organisation with a broad responsibility and a multi-disciplinary staff would be able to achieve solutions by practical means rather than by applying controls, which is the tendency of specific purpose authorities.'25

These were the same sentiments as expressed by Cartland about government administration as a whole.

The outcome of the Mant recommendations was non-implementation which must cause some concern about the possibilities for Cartland's proposals.

The Lowe ALP Government decided to implement the principle of integration of structure proposed by Mant and gave instructions that it was to be completed in six months. There was no legislation involved to begin with, the whole exercise being possible as an executive act. The new department was to embrace such functions as land use planning and the formulation of land use policy, the management of parks, protection of the State's environment, protection of flora and fauna, heritage, coastline, pollution control, general management of the Crown estate, local government policy and liaison, and the land information and service aspects.

The process by which implementation was tried is too long and complex to describe here. All that needs to be said is that it was a most valuable precedent for such future exercises, utilising a range of devices from conceptual charts of the proposed organisation; review committees comprising the people who would be most affected by the changes; weekly bulletins to all staff of the six departments; and a regular weekly forum of staff representing each department meeting with the Implementation Committee. The result was that by the time the ALP government was defeated at the election of 1982, many of the major issues had been resolved and the new department would have emerged in the course of the next few months.

In the event, it did not do so because the newly elected Gray Liberal Government decided not to proceed with the task. There can be little doubt that it did so because some of the members of the departments most affected and their clientele had made some inroads into the politics of the situation and obtained a pre-election commitment. It is exactly this self-serving and self-justifying perception of agencies that is most challenged by the Cartland recommendations. It will require a very strong government indeed to overcome these kinds of pressure from within.

There are other similar episodes in recent times which can be used to illustrate the same point. Each shows the existence of a major barrier to establishing system-wide networks and perceptions. It is the narrowness of the technically-based departments. They feel most at risk because of the threat to their autonomy from the generalist administrator asking for policy oriented advice rather than the solution to the problem as understood by the technician. The problems of integration in the Education Department following the Hughes Report, similar issues in the Department of Community Welfare, and the inability of the Police Association to accept that Fisheries Inspectors are no different to policemen after the proposal of the Lynch Review suggesting the amalgamation of the Inspectors with the Police Force, are not isolated cases. They are currently matters of considerable concern to the government. Each shows the extent to which the entrenched interests will go to protect what they have, very often in the genuine belief that the existing organisation is most effective and most appropriate for the task.

## **New Procedures**

The changed procedures that Cartland was hoping to achieve through his proposals were to encourage policy formulation and policy advice rather than concentration on rigid technical solutions. For exactly the same reasons as have been noted above in relation to the reorganisation proposals, there are hurdles to be overcome here too. The expert is less than willing to admit into his calculations what the economists refer to as externalities. He rarely accepts, for example, the political atmosphere in which he is forced to operate, preferring sometimes to fight against the priorities of the government of the day. There is a sense in which those with expertise concentrate on becoming better able to do those things their expertise enables them to do, but never ask whether there is anything different to be done.

Cartland drew attention to the lack of consultation and information sharing between agencies. The notion of 'boundaries' referred to in respect of the land use management issue above is also relevant. Information is power and once shared it loses its potency as a bargaining counter. Departments see themselves so vertically differentiated with no sense of needing to coordinate their activities for the good of government administration as a whole. These are the differences between the 'line' department and the central agencies. The latter are expected to have a wider view, theirs is a coordinating role whereas the departments see themselves as in a defensive position fearful of losing their pre-eminent position derived from their specialist activity which no one else can perform.

Unfortunately this same situation can arise not only between agencies but within the organisation itself. Different groups such as the clerical or generalist officer is at odds with the specialist or 'line' operative. This has happened in many of the more professionally oriented departments such as Health Services, Education, Community Welfare, and Agriculture. These are similar issues to those which made the integration of land use management so difficult and eventually led to its demise.

There are understandable human reasons for the emergence of this situation. Cartland suggests that there has been a long process during which successive governments have been demanding technical solutions to the State's problems. The growth of technical departments overwhelmed any other growth in the public sector and fragmentation was the result. In an Officers' Opinion Survey conducted by the Cartland Inquiry there are some indications as to why this historical legacy will be very hard to divest. The Survey is divided into six parts: appointments and procedures; appeals against appointments; staff development and career planning; motives for joining and staying in public employment;

aspects of personal work situation; and part-time employment. It was conducted by one of the Cartland Inquiry Research Officers, and a Summary was published as Appendix 13.

No conclusions are being drawn from the Survey in what follows, only inferences which may affect the ease with which future changes may be made to the government administration while those who gave such opinions remain within the Service. Responses to questions relating to supervision, relationships with senior officers and the work situation, revealed that only one third of the respondees thought they were given adequate instruction for new work in most cases. Generally therefore the senior officers were not providing them with sufficient information or instructions on what was required of them. Only one third (31%) were able to state that they 'never received any criticisms from senior officers for happenings over which they had no control'. About two thirds (70.2%) could not say categorically that their senior officers 'often' spent sufficient time planning the work of the section. These replies are illustrative of an expectation that experts do not require to be told what to do; notions of management are not part of the operational style of specialist organisations. They also strongly support Cartland's comments about the low status of management in Tasmanian government administration. Similarly attention was drawn by respondees to the very poor flow of information and consultation between senior officers and their subordinates. This was felt more particularly by those who were in the general administrative group, who also thought they were under greater supervision than others.

The solution proposed by Cartland for these deficiencies was the introduction of a senior management service which would create a pool of managers capable of moving between departments. Such managers would ensure that the good technical work being done in each department would be backed up by good management. Their training would be specifically directed to reducing their commitment to any department and promotion would not be within any one agency. These managers would be developed through staff training programs aimed at providing those already in managerial positions in the service with managerial skills. Subsequently there would be a selection process by which groups of potential managers would go through a number of courses and gain varied experience to join the senior management group.

These proposals have in fact been taken up by the PSB Staff Development Centre which has held their first such course during 1984 for 15 people. The course was completed over a full year as a combination of in-house training by secondment for short periods to other departments and three periods of full-time attendance for training by Centre Officers and other paid consultants. In addition, the Administrative Trainee Scheme, which takes in 12 graduate recruits, six from within the service and six externally, was commenced in 1982. This program provides the opportunity for three months secondment to three different departments during the year, following a two week induction course at the Centre. In between the secondment the trainees undertake in-house coursework at the Centre.

These first steps to providing a career path for managers rather than technicians are likely to meet with some opposition if the opinions expressed in the Survey are any guide. There was a marked preference for experience as the basis for promotion, especially amongst those with 'professional qualifications'. The majority of those questioned (62.4%) also saw themselves as staying with the same agency, although some thought their job within the agency might change. There was a difference between those on clerical duties, the majority (69%) of whom saw themselves as much more likely to move either job or department compared with the 52% administrative and 61% professional who looked for a career in one department in their area of qualification.

The expectation that significant modification of existing procedures can occur in the circumstances outlined above must be regarded as over optimistic. There is nothing to stimulate and motivate such people to change unless they can perceive some direct individual benefit to themselves. They have no feeling for the system as a whole, little loyalty to whichever government happens to be in authority, and not much organisational

loyalty either. The necessary attitudinal morphology cannot emerge without a deliberate effort from some external pressure.

# **New People**

It is therefore not so much new legislation, new organisations or new procedures that will be of primary importance in the future shaping of the Tasmanian government administration, it is new people. This is not to say 'new' in the sense of replacement of those already there, although some of that will be necessary. The requirement is for a wholesale replacement of the current norms and standards by which they work.

The necessity is to alter the forms, style, mode of operation and frame of reference of the major actors in the new State Service. The Cartland Report provides guidelines about the direction for those alterations but it requires some group or individual to maintain the demands for change. Governments are notorious for their fickleness and inconsistency, responding to immediate political demands rather than single-mindedly pursuing an objective, particularly relating to government administration. The upheavals that the Cartland expectations will mean to individuals and their organisational framework, whether politician or official, will militate against internally generated change. There are signs that this is not yet sufficiently recognised by many of the present incumbents and may lead to a diminution of the impetus created by the new legislation.

Cartland was quite aware of the forces that would build up against his proposals and noted three attitudinal problems for the whole administration.<sup>26</sup>

- a natural inbuilt conservatism and inertia about the prospect for change;
- insufficient coordination and consultation between those involved in generating change; and
- lack of any agency with an overall view of the whole machinery of government.

Despite the modifications that have been made already to the system, including the State Service Act, these same features still predominate. It is to be hoped that Cartland's warning will be heeded by politicians and senior public servants into the future.

'The new policies cannot come to fruition until some of the basic changes have been made and the new authorities have been created to manage them. For these reasons I have recommended an implementation plan which will provide for the proper sequence of events, establish and maintain the momentum of change and ensure that important parts of the plan are not overlooked. I would expect the plan to cover a period of at least two years. Its preparation is therefore a matter of urgency.'27

The problem is that the Administrative Review Committee, which had the task of implementation, has not gone beyond setting up the legislative framework. There are no signs that the government has any intention of continuing its existence for the purposes recommended.

There is no other body capable of undertaking this guiding and monitoring role. In the immediate response to Cartland, some reorganisation has taken place and, as a result, too many of the officers appointed to senior positions were promotions of 'insiders'. This does not augur well for the future since they will carry with them the older style of thinking and not provide the lead that the changes require. However, since then, many senior positions have been widely advertised and filled by staff from outside departments. The Department of Public Administration is a case in point and there are others such as Agriculture and Forestry. Treasury has also made two Deputy Under Treasurer appointments from outside Tasmania as well as some other senior staff appointments. Only a body of senior politicians and officials such as the Administrative Review Committee can maintain the momentum of change. Its status as a Cabinet Sub-Committee chaired by the Premier ensures that its decisions will be respected.

In addition to this, or a similar body, there will need to be an increase of lateral recruitment and appointment to senior positions. It has been found in other States which have already embarked on the reform process, that there has been no other way to reduce the inertia of the existing norms and values. In Victoria, for example, there was a changeover of about 30 percent of the senior officials within the first year, many of the appointees coming from the Australian government administration and some from private enterprise or academia. While there has been an increasing number of such appointments in Tasmania over the last year, especially to the newly established Tasmanian Development Authority, not enough attention has been paid to lateral recruitment to senior positions in 'line' departments where they are sorely needed. In these agencies, in particular under the State Service Act, where they are statutory authorities, the tendency is to remain inward-looking and protective. Governments must recognise that the State's best interests will only be served by concentrating greater effort and resources to obtain the services of people with attitudes that reinforce commitment to the Cartland proposals. Without this fundamental attitudinal change only marginal gains will be made from the reorganisation which has now been set in train. The central agencies will certainly have been revitalised but the bulk of the Service will remain just as rigid, just as narrowly conservative and fragmented as before.

Successive governments must recognise that the legislation is only one component of change. It is only the beginning of the process of change not the end point. If the comments by M. Huxtable, Assistant Secretary, Public Service Association, that the legislation is the result not the reflection of the Cartland Report are accurate, then it is even more important to maintain a vigorous policy into the future.

The major purpose of governments and public officials should be to ensure that their decisions are made for the benefit of the whole community. They should always bear in mind the five attributes that characterise good government mentioned earlier in this essay and measure what they do, how they do it and why they do it, against those attributes. Their capacity for providing good government into the future will depend on organisational adaptation and revitalisation that is continuous, ongoing and internally generated. It will not be sufficient to rely on a major external investigation every 70 years. The whole government administration must be able and willing to respond to the challenges that will occur. These challenges are now, and will increasingly be in the future, beyond the capacity of any single specialisation to meet. Tasmanian government administration is entering an era which provides exciting new possibilities for service in the community. It is in their hands whether they respond in such a way as to promote and maintain their reputation for integrity and responsibility and gain the respect and support of the community. Without those qualities the public sector becomes increasingly remote and ineffective at a time when the opportunities and demands are boundless.

#### **Footnotes**

1. Report of Phase II of the Review of Tasmanian Government Administration
Presented by Sir George Cartland in two instalments: I in September 1981,
II with Appendices in November 1981.

All subsequent references will read Report I or II with paragraph and page.

- 2. Report I Preface p 1.
- 3. Report I B 1.6.6 p 36.

4. The classification system used in that of Wettenhall in 1968 as none is used in the Directories. R. L. Wettenhall, A Guide to Tasmanian Government Organisations, Platypus Press, Hobart 1968.

Howard has noted a similar growth in the Commonwealth administration and is led
to wonder if it is an area of 'hidden' government employment in times of the
political rhetoric of small government. J. Howard, Background Paper RAIPA
National Conference, 1983.

- 6. Report I B 1.6.8 p 37.
- 7. Report I B 6.11 p 38.
- 8. Report I B 1.3.3 p 30.

- 9. Report I B 1.3.5 p 31.
- 10. Report I B 1.3.6 pp 31-2.
- 11. Report I B 1.4.1 p 32.
- 12. Report I B 1.2.2 pp 29-30.
- 13. Report I B 2.9.1 p 52.
- 14. Report I B 2.6.4 p 49.
- 15. Hansard Debates April 4, 1984.
- 16. Hansard Debates April 4, 1984.
- 17. Report II F 3.1.1 p 186.
- 18. Report II D 1.2.1 p 6.
- 19. Report II D 2.3.2 p 19.
- 20. Report II E 8.2 pp 144-146.
- 21. Report 1 B 2.5.2 p 47.
- 22.
- Report I C 1.3.3 p 61. Report I C 1.2.6 p 59. 23.
- 24. This account relies heavily on M. Laughlin 'Functional Integration: The Mant Report and DURMA' Proceedings RAIPA (Tasmanian Division) Annual Seminar Communication in Public Administration: Dimensions and Issues, November 1984 pp 88-94.
- 25. ibid. p 90.
- 26. Report I p 39.
- 27. Report II F 3.1.4 p 186.

# **Bibliography**

Apart from the texts already cited in footnotes I have used:

- R.J.K. Chapman 'The Tasmanian Public Service and the Future' Australian Journal of Public Administration Vol. XXXVII, No 4, December 1978,
- pp 386-397. R.J.K. Chapman 'The Cartland Report: Re-organising Tasmanian Government Administration' Canberra Bulletin of Public Administration Vol. IX, No 3, Spring 1982, pp 13-20.
- R.J.K. Chapman 'A Tasmanian Perspective on the Cartland Report' in *Proceedings* Annual Seminar RAIPA (Tasmanian Division) The Cartland Report and its Implications for Tasmanian Government Administration Hobart, February 1983 n.p.
- Proceedings Annual Seminar RAIPA (Tasmanian Division) Changing Needs of Government Administration: 1980 and Beyond Hobart, October 1980 n.p.

#### LOCAL GOVERNMENT

At the time of writing, Local Government in Tasmania is administered by the councils of 45 municipalities and the cities of Hobart, Launceston, Glenorchy and Devonport. Each council consists of members elected by a local community and is responsible for the provision of many of the services necessary for the organisation and welfare of the community which it represents. The first division of Tasmania into local administrative districts occurred in 1827 when the Colony was divided into nine police districts. An outline of the history of local government is included in the 1984 and earlier editions of the Year Book.

In Tasmania there are only two categories of local government, a municipality or a city. Before a municipality can petition to become a city, it must have had, for five years before the petition, an average population of not less than 20 000. The authority for and the forms of local government are prescribed entirely by State legislation which has largely been consolidated in the Local Government Act 1962. Hobart and Launceston cities operate under separate corporation Acts but the other authorities, including the cities of Glenorchy and Devonport, operate under the Act of 1962 and the Local Government (Highways) Act 1982.

#### Electors

Persons eligible to vote in local government elections must be either: an owner or occupier of rateable land who is a British subject over the age of 18 years; or a person who has lived in a municipality for a period of at least six months and is enrolled as an elector for the Legislative Council or House of Assembly in respect of a division or subdivision that includes whole or part of the municipality. In 1972 the Local Government Act 1962 was amended and plural voting abolished; an elector may now exercise, at the most, three votes—one in his own right and two on behalf of other persons.

In no Australian State are unnaturalised aliens, who are owner-occupiers, eligible to vote at local government elections; Tasmania is the only State with a provision for aliens to have another person vote on their behalf.

#### Councillors

A councillor must be an elector of, and either reside or carry on business in, the municipality and is subject to disqualification for certain breaches of conduct. The term of office is three years and one-third of the council retires each year. Councils may comprise six, nine, 12 or 15 councillors. The warden, deputy warden and treasurer are elected by the council members on an annual basis. The electors of the City of Hobart elect the Lord Mayor and in Glenorchy and Devonport the electors elect the Mayor. However, the Mayor of Launceston is elected by council members. The office of warden is comparable with that of the mayor of a city or the president of a shire in other states.

#### Government Intervention

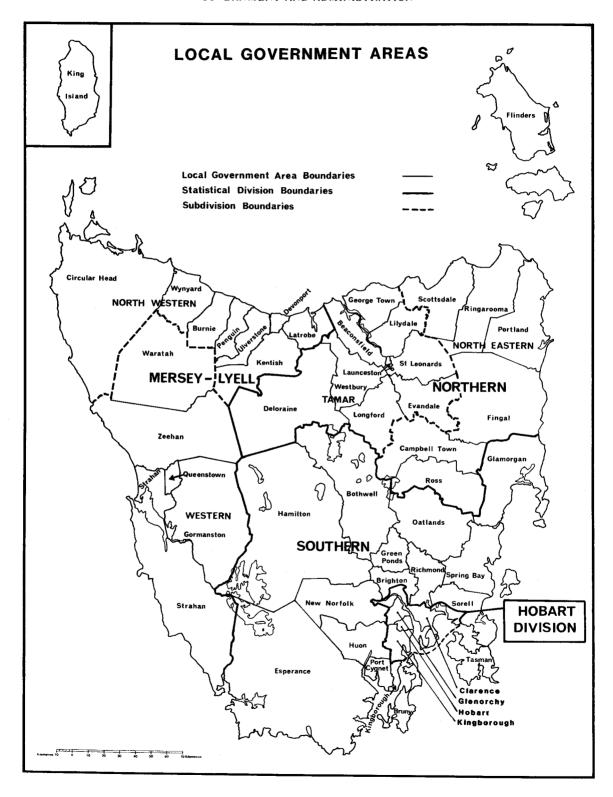
For any of a number of reasons, the Minister administering the *Local Government Act* may consider it necessary to recommend suspension of the elected councillors and the appointment of a commission, or in certain cases, an administrator to carry on municipal government in a particular municipality.

#### Finance

Local government finance statistics in Tasmania are compiled by the ABS from annual local government accounts supplied to the Auditor-General by each local government authority. These statistics are included in Chapter 4, 'Public Finance'.

## Water Supply and Sewerage

Water supply and sewerage were once exclusively the responsibility of the cities and municipalities. Two semi-government authorities, the Rivers and Water Supply Commission and the North-West Regional Water Authority, now operate bulk supply schemes, piping water for distribution by the local government authorities in the Hobart, Launceston and North-West areas, and directly to certain industrial consumers. Each authority is described in greater detail in Chapter 15, 'Energy and Water Supply and Sewerage'.



Population, Area and Property Valuation: Local Government Authorities, 30 June 1983

Municipality	Estimated resident population 1983	Area ('000 hectares)	Number of rateable properties(a)	Assessed annual value (\$'000)	Year of valuation (b)
Beaconsfield	14 520	63.8	6 787	11 766.3	1979
Bothwell	710	260.8	1 291	2 319.3	1977
Brighton	11 070	44.1	3 407	6 545.8	1978
Bruny	390	36.2	1 123	642.8	1980
Burnie	20 560	61.8	7 746	23 761.0	1980
Campbell Town	1 530	143.6	651	2 488.0	1977
Circular Head	7 930	491.7	3 968	4 750.9	1978
Clarence	46 010	25.1	15 905	38 539.8	1979
Deloraine	5 060	291.6	2 412	4 679.6	1981
Devonport	24 410	11.6	11 000	30 425.6	1982
Esperance	3 140	618.6	2 124	1 769.7	1978
Evandale	2 060	99.0	1 058	3 709.6	1977
Fingal	2 890	273.1	2 024	1 744.1	1979
Flinders	1 110	199.1	1 024	993.4	1978
George Town	7 290	65.4	3 698	9 907.9	1977
	1 520	153.5	1 859	2 261.9	1977
Glamorgan					1980
Glenorchy	41 510	12.0	14 338	42 037.2	1978
Gormanston	110	287.2	110	43.1	
Green Ponds	1 040	41.6	523	1 003.7	1980
Hamilton	2 500	585.0	1 127	3 421.1	1977
Hobart	47 590	8.0	18 400	87 467.2	1979
Huon	4 840	77.4	2 374	3 169.7	1980
Kentish	4 420	118.7	2 110	2 572.3	1978
Kingborough	18 400	35.5	8 043	22 011.7	1977
King Island	2 680	109.9	1 561	2 459.6	1980
Latrobe	5 700	54.9	2 896	7 110.2	1981
Launceston	31 590	2.8	12 337	52 461.7	1980
Lilydale	9 180	68.4	3 796	9 268.7	1981
Longford	5 910	99.8	2 230	5 151.8	1979
New Norfolk	9 730	131.6	3 364	9 668.5	1981
Oatlands	2 020	154.0	1 080	3 405.7	1981
Penguin	5 330	43.2	2 207	3 234.2	1979
Port Cygnet	2 340	24.0	1 792	1 801.4	1981
Portland	2 300	158.1	3 056	2 258.4	1978
Oucenstown	3 680	14.2	1 568	2 375.2	1981
Richmond	1 900	56.8	1 048	1 954.8	1980
Ringarooma	2 360	163.2	1 608	1 180.7	1978
Ross	500	124.0	325	1 182.2	1977
St Leonards	21 090	89.1	6 950	19 003.3	1981
Scottsdale	4 460	129.2	2 474	5 776.3	1977
Sorell	5 740	78.2	6 406	6 943.6	1977
Spring Bay	1 940	112.2	1 467	2 227.5	1980
Strahan	450	373.3	573	362.1	1981
Fasman	1 120	48.0	1 666	1 370.7	1981
				10 374.1	1901
Ulverstone	13 390	51.1	5 136		
Waratah	2 200	270.9	816	1 328.0	1981
Westbury	6 960	90.4	2 976	6 346.7	1978
Wynyard	12 280	81.3	5 069	11 541.2	1977
Zeehan	6 740	300.3	1 969	3 538.0	1981
Total	432 200	6 833.3	187 472	480 356.1	

<sup>(</sup>a) Separate parcels of land (i.e. having different legal titles) held under common ownership are counted as one property where they are operated as a single unit.

<sup>(</sup>b) Effective from 1 July of year shown.

#### PLANNING AUTHORITIES

#### **Town and Country Planning**

#### Introduction

Before 1941 governments (both State and Commonwealth) had shown little interest in town planning legislation. The war-time Commonwealth Labor Government encouraged activity in this field and in the period 1944-45 four States, including Tasmania, passed legislation with provisions largely based on existing British and New Zealand planning statutes.

Passed in 1944, the Tasmanian Town and Country Planning Act applied only to areas which were proclaimed as a result of municipal requests. The Act created the position of Town and Country Planning Commissioner. In 1962 the Town and Country Planning Act was repealed and its provisions incorporated in the Local Government Act 1962 under which the powers of the Commissioner were broadened so that, with the approval of the Minister, he could require any municipality to prepare a planning scheme. The Commissioner for Town and Country Planning functions as a corporation solely under the Local Government Act 1962 and in respect of his statutory powers is responsible to Parliament.

#### **Functions**

Briefly, the function of the Commissioner is to approve municipal planning schemes and to certify that subdivision proposals are in accordance with these schemes and meet the other requirements as laid down in the Local Government Act 1962. Also the Commissioner may require: any municipality to prepare a planning scheme; or two or more municipalities to co-operate in the preparation of a master planning scheme. He is empowered to specify the completion date for such schemes. If the municipality fails to comply with the Commissioner's requests, then the Commissioner may prepare a scheme, the municipality meeting all preparation costs. A municipality may voluntarily prepare a planning scheme and submit it to the Commissioner for approval. If a scheme, prepared for an area to which a master plan applies, is submitted to the Commissioner for approval then the Commissioner, before giving a decision, must consult the authority which prepared the master plan. The Commissioner is also empowered to deal with objections to any planning scheme, including master plans prepared by a master planning authority.

## Legal Procedure for a Planning Scheme

After the Commissioner gives provisional approval to a planning scheme the municipality must make public the scheme and place a copy in the municipal office for public inspection. Following public notification a three months period is allowed for objections to the scheme by: any owner or occupier of rateable property in the area affected; health officers as defined in the *Public Health Act* 1962; or the municipality, but only if the scheme has been altered or prepared by the Commissioner. Objections are lodged with the municipality which then forwards the objections, together with a statement of its opinion on them, to the Commissioner for his consideration. The Commissioner hears and determines all the objections except in such cases where he considers the objection sound and the municipality agrees with it. The municipality may request and be entitled to a formal hearing.

If, because of the number and magnitude of objections to a planning scheme, the Commissioner considers it should be substantially modified, he may: recommend that the Minister reject it; or direct that a specified part of the scheme be revised. In both of these cases another scheme or part scheme has to be prepared and submitted to the Commissioner for provisional approval.

After all objections have been dealt with and the necessary modifications made to the scheme, the Commissioner, with the Minister's approval, approves and seals the scheme. The sealed scheme is then publicly notified, placed before both Houses of Parliament and recorded in the central plan register.

# Scope of Plan

A town and country planning scheme may deal with the following planning matters: (i) all roads (public and private), streets, footpaths, building lines and land adjacent to foreshores—the plan should cover both alteration to existing roads, streets, etc. and proposed new roads, streets, etc.; (ii) positioning of buildings and the general nature and design of building sizes and dimensions of lots and other blocks into which land may be subdivided; (iii) preservation of land for afforestation, recreation and open spaces; (iv) preservation of objects of historical interest or natural beauty; (v) sewerage and drainage; (vi) lighting and water supply systems; (vii) specification of the use to which areas may be put; (viii) provision of amenities; (ix) stages of development; and (x) ancillary or consequential works.

# Subdivision Approvals

Except where the Commissioner authorises a council or master planning authority to deal with subdivision plans, all such plans submitted to the council must be forwarded to the Commissioner for approval. (At any time, a council's power to authorise subdivision plans without reference to the Commissioner may be withdrawn by him.) When considering subdivision plans the Commissioner may: (i) call for an amendment that either the council requires or the Commissioner considers the principles of town and country planning demand; or (ii) refuse consent to the council approval. The Commissioner is required to ensure that areas for public use are retained along sea and lake shores and rivers and rivulets.

# Planning Appeal Board

The Planning Appeal Board consists of a Chairman, who must be a legal practitioner or barrister, and two other members, at least one of whom must be experienced in town and country planning. Persons affected by the decisions of a local government authority in approving or refusing planning approvals may appeal to the Planning Appeal Board. The Board's determination of an appeal must be given effect to by the municipality. Its decision is conclusive and binds all parties to the appeal. Notices of appeal must be lodged with the Clerk to the Commissioner for Town and Country Planning.

# Regional Planning

There are currently two Master Planning Authorities, one in the north (the Tamar Regional Master Planning Authority) and one in the north-west (the North-West Master Planning Authority). The Southern Metropolitan Planning Authority disbanded in April 1982.

Sections 740 to 749 of the *Local Government Act* 1962 provide for the creation, membership, financial arrangements and statutory duties and responsibilities of master planning authorities. In general terms the duties and responsibilities of such authorities are to prepare master plans for the whole of the area of its constituent members, and the determination of policies that should be adopted with respect to the use and development of land within the districts of its constituent municipalities having regard to the promotion of the region as an entity in economic, administrative and social terms.

# Tamar Regional Master Planning Authority

The Tamar Regional Master Planning Authority was established in September 1969, following a petition to the State Government by the City of Launceston and the municipalities of Beaconsfield, George Town, Lilydale, Longford and St Leonards. Westbury and Evandale, two essentially rural municipalities, became members in April 1974 to complete the membership of the natural region. In 1978, the Port of Launceston Authority became a constituent member.

The total funding contribution for 1984-85 from Authority members is \$56 000 and \$45 000 from the State Government.

#### Background

The Authority's primary role is to provide the overall framework for local planning and development in the Tamar Region—'a guiding hand'. The Authority undertakes major planning studies, deals with strategic, statutory and local issue projects; provides advice to councils, government departments and the public; and plays a key role in promotion activities, representations and submissions.

Initially, a consortium of town planning consultants was engaged to produce a preliminary report which was completed in mid-1971. This report formed the basis for the Regional Plan for the area, which was prepared by the Authority's staff. The aim of the constituent councils in the preparation of the Regional Plan was the unified promotion of and development of the Tamar Valley region. The plan was prepared under three principal objectives — planning, environmental and promotion.

The planning objectives proposed four principal divisions aligned north to south along the Tamar River and South Esk:

- Northern Tamar—centred on the port of Bell Bay with the principal theme being the development of industrial potential and port facilities.
- Central Tamar—extending from Moriarty Reach to Dilston; to be promoted as a recreation and tourist area with the preservation of the existing scenic landscape character.
- Southern Tamar—centred upon Launceston with provision for the retention and further development of the City as the commercial and service centre of the region.
- Esk Valley—rationalisation of transport links and industries, and the promotion of the area's intensive agricultural potential.

The major regional planning policies were completed in 1974, and adopted by the constituent councils. During 1975 the final adopted policies were compiled into a strategic planning policy and submitted for Government approval. These policies were again revised in the 'Tamar Region Plan, 1979'.

In May 1983, the Authority commenced a challenging and most necessary task, to develop and mould all previous strategic and local plans and policies plus all previously unconsidered territory into one statutory planning scheme for each municipality, there are eight in all. The intentions are that each municipality shall have one statutory planning scheme which will cover the total area of that municipality, that each scheme will be based on the previously agreed on regional strategies and that each scheme will have a compatible zoning and ordinance structure.

## Projects During 1984

Work on planning projects were:

- Draft completion of a statutory planning scheme covering the entire Beaconsfield Municipality;
- Revisions and redrafting of the George Town Planning Scheme Area 1, 1983;
- Land use surveys for most of the township areas of the region and the preparation of draft zonings for the rural areas of Westbury, Longford, Evandale, Lilydale and George Town municipalities.
- Generation of a methodology to determine rural/residential zoning suitability using the Lilydale Municipality as a model.

Submissions lodged during 1984 were:

- March 1984—to the Minister for Defence and the Minister for Defence Support seeking an increase in Defence Support expenditure in the Tamar Region.
- April 1984—for the Launceston Airport Action Committee, 'Which Tasmanian Airport Should Receive International Status?'
- May 1984—to the National Road Freight Industry Inquiry.
- August 1984—to the Inter-State Commission, 'Matters relating to the Tasmanian Freight Equalisation Scheme'.

The Authority coordinated two seminars on matters relating to the landslip problem in the region and helped to organise a seminar to disseminate information about opportunities for manufacturers to secure Department of Defence Support contracts.

Rural Subdivision Control

In 1978, the Town and Country Planning Commissioner delegated his power of consent to Council approval of rural subdivisions to the Authority, subject to his policy guidelines and subject to close collaboration with and supervision by his staff. Between January 1984 and November 1984, the Authority considered 53 subdivision proposals.

Authority Restructuring

In March 1983, the Authority commissioned an independent review of its membership structure and funding. Arising from the review the Authority resolved to pursue a restructuring proposal which resulted in the Local Government Amendment (Master Planning Authority's) Act 1983 being proclaimed 15 October 1984. The Act requires that Council representation on the Authority must be by elected councillors or aldermen, two from the City of Launceston and one from all other municipalities; plus three representatives appointed by the Governor. The Authority met for the first time in its restructured form on 6 February 1985.

# North-West Master Planning Authority

This Authority was constituted in February 1971 in accordance with provisions of the Local Government Act 1962. The 10 member local government areas are Latrobe, Kentish, Devonport, Ulverstone, Penguin, Wynyard, Circular Head, Deloraine, Burnie and Waratah. Devonport and Burnie councils each have two members, and the other eight councils have one member each and there are three members appointed by the State Government. Finance is obtained from member municipalities in proportion to the equalised annual value of rateable property, with a contribution from the State Government in respect of work undertaken for the Town and Country Planning Commission. Approximately 14 712 square kilometres in area and containing a population of some 101 000, the Authority's sphere of jurisdiction includes two interstate airports, three marine board port facilities, substantial industrial establishments with international markets, one city and nine principal towns, and prime soil districts supporting forestry, livestock and vegetable production.

The fundamental objective of the Authority is to foster, co-ordinate, and promote the development of the region along sound economic and environmental lines. Under State legislation, it is charged with the duty of determining the policies that should be adopted with respect to the use and development of land within the districts of its constituent municipalities particularly having regard to the desirability of the promotion of the region as an entity in economic, administrative and social terms.

An initial policy adopted by the Authority was to inhibit further linear expansion along the coast and to focus development inwards from the existing urban nodes, with the rural landscape in between serving as punctuating relief. This has been schematically illustrated in an Outline Development Strategy Map and Report released in November 1974. The Authority has also endorsed the concept of Burnie being the cultural and arts centre for the North-West and West coasts of Tasmania as a regional complement to the major facilities provided in Launceston. In addition, concerted support has been accorded the unique and ambitious 9 000-hectare Dial Regional Sports/Recreation Complex implemented in the central location of Penguin.

The Authority is also presently engaged in the promotion of industry, based on the raw materials of the region, and tourism in the area.

#### **Further References**

ABS Publications:

Year Book, Australia (1301.0), normally annual.

Australian Municipal Information System (AMIS) Manual (1103.0), irregular, latest issue released in December 1980—this Manual describes the AMIS computer data base system which contains a range of data on a comparable basis for all Australian local government areas. Output from the system is available on request.

Other Publications:

Acts of the Parliament of Tasmania (annual, Tasmanian Government Printer, Hobart).

Tasmanian Statutes 1826-1959 (Consolidated reprint) (Tasmanian Government Printer, Hobart,

SOLOMON, D. Australia's Government and Parliament 4th edition (Nelson 1978).
TOWNSLEY, W. A. The Government of Tasmania (University of Queensland Press, St Lucia, 1976).

# **CHAPTER 4**

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# Chapter 4

# **PUBLIC FINANCE**

# FEDERAL, STATE AND LOCAL GOVERNMENT

# Change in Relationship Since 1901

Prior to the establishment of the Commonwealth in 1901, the individual States exercised complete autonomy with respect to their raising of revenue and the manner in which this was spent. Due to developments since Federation, the States now have only limited ability to raise the money required for revenue and capital purposes. State revenue is now supplemented by substantial grants from the Commonwealth Government and the raising of loans is under the control of the Australian Loan Council, a body set up under Commonwealth legislation. The emergence of the Commonwealth Government as the dominating influence in the financial transactions of the State governments can be traced to three events:

• under the Constitution, the States surrendered the right to levy customs and excise duties, which passed exclusively to the Commonwealth Government;

• under the 1927 Financial Agreement, the Australian Loan Council became the

borrowing agent for the States;

during World War II, under the uniform tax scheme, the Commonwealth Government became the sole authority levying taxes upon the income of persons and companies. (Introduction of new Federal-State income tax sharing arrangements from 1977-78, has given each State the right to impose a surcharge or grant a rebate on personal income tax levied in its State.)

The result of these changed relationships can be summarised as follows: the Commonwealth Government, with two votes plus a casting vote as against one vote for each of the States, exercises a substantial degree of control over the Australian Loan Council and, consequently, over public investment in government securities; to carry out functions for which their revenue is inadequate, the States have become heavily dependent on the Commonwealth Government for general and specific grants. The Commonwealth Government is therefore placed in a position to exercise a substantial degree of control over the ordinary public expenditure of the States.

# Principal Activities of the States

The Commonwealth Constitution lists the matters over which the Commonwealth Parliament has power to legislate. Some of those powers are given exclusively to the Commonwealth Government (e.g. defence, customs and excise) but, in many matters, the Commonwealth and State Governments have concurrent powers, Commonwealth law prevailing where there is conflict. Matters other than those listed in the Constitution remain the concern of the States. Principal government activity at State level embraces education, health and welfare services, the development of internal resources, land settlement, soil conservation, maintenance of law and order and the provision of public utility services such as roads, electricity, public transport and water supply. Such activities are undertaken either by State departments or by statutory and local government bodies created under State legislation. Apart from charges for services (where charges can be levied) the most obvious form of revenue for the discharge of these functions is State taxation but the Commonwealth Government exercises a practical monopoly over the more lucrative tax sources (e.g. income tax, customs and excise, sales tax). A responsibility therefore rests on the Commonwealth Government to supplement State revenues.

# Commonwealth Government Payments To or For Tasmania

# Summary of Commonwealth Government Payments

In the following sections the main forms of Commonwealth Government assistance are described; the following table shows the total annual payments to Tasmania from the Commonwealth Government's Consolidated Revenue Fund:

# Commonwealth Government Payments To or For Tasmania (\$'000)

Particulars	1980-81	1981-82	1982-83
General Purpo	ose Funds		
ersonal income tax entitlement	298 602	322 031	362 777
lealth grants		4 747	5 221
Capital grants	30 539	30 539	32 076
Total	329 141	357 317	400 074
Specific Purpose Payr	nents—Recurre	nt	
Levenue payments—			
Payments under financial agreement—			
Interest on State debt	534	.534	534
Sinking fund on State debt	2 675	2 816	2 958
Universities	24 740	30 403	32 310
Colleges of advanced education	8 739	8 323	9 459
Technical and further education	2 154	2 600	3 200
Schools	17 565	19 942	24 282
Pre-schools and child care	1 871	1 801	1 943
Public hospitals (running costs)	43 029	42 361	45 253
Community health	2 534	83	
School dental scheme	1 688		38
Assistance for local government	9 624	11 227	13 582
Rehabilitation centres	594	915	1 189
Special employment programs	• • • • • • • • • • • • • • • • • • • •	710	2 834
Other	4 275	3 950	5 052
Total recurrent payments	120 022	124 955	142 634
Capital payments—			
Universities	1 043	1 345	1 404
Colleges of advanced education	952	377	405
Technical and further education			
Technical and further education	4 772	3 483	3 490
Schools	3 988	5 319	5 172
Hospitals	3 400	2 400	1 357
Welfare housing	10,770	8 964	8 407
Pensioner housing	976	992	1 009
Other housing assistance	3 760	3 597	7 963
Port Arthur conservation program	800	1 200	1 300
Tourist roads assistance	000	1 200	10 000
Roads	27 726	30 243	32 406
		30 243 16 441	16 711
Second Hobart Bridge	6 413	10 441	
Special employment—public housing			1 185
Assistance to primary industry	1 191	570	248
Other	3 805	2 057	5 799
Total capital payments	69 596	76 988	96 856
Total specific purpose payments	189 618	201 942	239 490
General and Specific I	Purpose Paymer	nts	
Total payments (a)	518 759	559 259	639 564
Percentage increase over previous year	510 137	7.9	14.4

<sup>(</sup>a) This total cannot be identified as such in State accounts since part is taken into Consolidated Revenue Fund, part into Loan Fund, and the balance into Trust and Special Funds.

# Financial Assistance Grants

Under the Commonwealth States Grants (Income Tax Reimbursement) Act 1942 the States received general revenue grants for vacating the field of income tax. Various formulae were used to calculate each State's grant. From 1959 to 1975-76 the method was to annually increase the grant by multiplying the previous year's grant by: the State's percentage increase in population; the percentage increase in average wages for Australia; and a betterment factor. The betterment factor was 1.2 per cent from 1965-66 to 1970-71, 1.8 per cent from 1971-72 to 1975-76, and 3.0 per cent for subsequent years.

# Personal Income Tax Sharing with the States

In 1976-77, financial assistance grants were replaced by personal income tax sharing arrangements between the Commonwealth and the States. This was a central element in the 'new federalism' policy of the Fraser Coalition Government. The income tax sharing between the Commonwealth and States was introduced in two stages. The first stage became operative in 1976-77; the second stage required further Commonwealth and State legislation. Federal legislation for Stage 2 was passed during 1977-78.

The principal elements of Stage 1 are:

• The States receive a given percentage (39.87) of the net personal income tax collections for the previous year. This replaced the previous arrangement whereby the amount was 33.6 per cent of the collections for that year. The changes were enacted following the recommendations of the October 1977 Promises: Conference

tober 1977 Premiers' Conference.

• For the first four years of the scheme (1976-77 to 1979-80) the Commonwealth guaranteed that no State would receive less than it would have under the old financial assistance grant formula. In 1980-81 the States were guaranteed that each would receive no less in real terms than the amount received in 1979-80, as measured by the Consumer Price Index movement in the capital city of each State for the four quarters to March 1981.

• The total entitlement for all States is first decided. The amount is then divided between each of the States on the basis of each State's population and a relativity factor based on 1975-76 financial assistance grant receipts.

• The four less populous States can continue to apply for special grants in addition to their basic income tax sharing entitlements.

• There will be periodic reviews of relativities between States.

In 1982-83 Tasmania received \$363 800 000.

Under Stage 2 each State may legislate to impose a surcharge on personal income tax in the State or to give a rebate of personal income tax payable under Commonwealth law. The State bears the cost of any such rebate. The Commonwealth will collect the surcharge or grant the rebate as the State's agent. In the case of a surcharge levied by one of the four less populous States, the Commonwealth will make equalisation arrangements. These will ensure that the State will get the same relative advantage from the surcharge as a State with a broader personal income tax base.

# Review of Tax Sharing Relations

After an extensive inquiry commencing in March 1979, the Commonwealth Grants Commission presented its *Report on State Tax Sharing Entitlements* 1981 on 9 June 1981. The Commission found that a change in the State factors which prescribe the per capita relativities between the States was desirable. The assessed factors derived by the Commission on the basis of its interpretation of the fiscal equalisation principles set down in Section 13(3) of the *States (Personal Income Tax Sharing) Act* 1978 in its 1981 report, along with factors prescribed at the time of the report, are shown in a later table, State Factors.

A Premiers' Conference was convened on 20 June 1981 to consider, inter alia, the Commonwealth Grants Commission's Report on State Tax Sharing Entitlements 1981. While there had not been adequate time since the Report became available for

Governments to complete their studies of it, most States had comments and queries on particular aspects of the report.

A major concern was that the implementation of the assessed factors in 1981-82 would have resulted in large changes in the distribution of financial assistance among the States. The result for Tasmania would have been a reduction of \$64 million. Following discussions, it was decided that the Commission should prepare a further report for consideration in early 1982.

Further, in view of the financial difficulties that would be created for South Australia, Western Australia and Tasmania if the distribution between the States of the tax sharing grants for 1981-82 were to be based on the factors assessed by the Commission, it was decided that there would be no change to the relativities contained in the States (Tax Sharing and Health Grants) Act 1981 in respect of this year.

Terms of reference for a further review of State relativities were given to the Commission in October 1981. It had to review its assessments contained in the 1981 report using the same principle of fiscal equalisation as set out in Section 13(3) of the State (Personal Income Tax Sharing) Amendment Act 1978. Submissions from interested parties and changes in Commonwealth-State financial arrangements since the 1981 report (e.g. health funding) had to be taken into account.

The report was presented in May 1982. The Commission confirmed its 1981 view that changes in State relativity factors were necessary. The report contained two alternative sets of tax sharing relativities. One reflected relative health needs in the tax sharing grants (as in the 1981 report); the other with relative health needs reflected in an alternative distribution of identified health grants. (At the June 1982 Premiers' Conference it was decided that relative health needs should be reflected in the distribution of tax sharing grants and that the identified health grants should continue to be distributed on the basis set out in the States (Tax Sharing and Health Grants) Act 1981.) The following table shows the factors: used to calculate the 1981-82 payments to the States; assessed in the 1981 report; and assessed in the 1982 report.

Factors used to calculate	Factors assessed by the		
1981-82 general revenue	Commission in		
payments to the States	1981 report	1982 rej	

State Factors (a)

State	Factors used to calculate 1981-82 general revenue	Factors assessed by the Commission in		
	payments to the States	1981 report	1982 report	
New South Wales	1.02740	1.048	1.018	
Victoria	1.00000	1.000	1.000	
Queensland	1.39085	1.487	1.531	
Western Australia	1.66516	1.284	1.368	
South Australia	1.52676	1.319	1.402	
Tasmania	2.00188	1.549	1.589	

(a) State factors show how each State's per capita grant should exceed the per capita grant received by

Differences between State shares assessed in the 1981 and 1982 reports were principally caused by revisions to State populations following the 1981 Census, and changes in the distribution of health grants under new health funding arrangements agreed between the Commonwealth and States following the 1981 report. (Commission's assessments take account of distribution of specific purpose payments such as health grants in so far as such payments are provided to assist the States in funding recurrent expenditures which are subject to Commission examination.)

The main effect of the Commission's proposals would have been to shift grants from the less populous to the more populous States. The next table shows the estimated effect on the 1982-83 distribution of tax sharing grants, had the Commission's recommendation been adopted:

	under relativities	Per capita grants under Commission's	Differences in grants		
State	prescribed in States (Tax Sharing and Health Grants) Act 1981 (a) (\$)	relativities in	Per capita grants (%)	Total grants (\$m)	
New South Wales	443	450	+ 1.6	+ 38	
Victoria	434	442	+ 1.8	+ 32	
Queensland		676	+12.6	+185	
Western Australia	705	604	-14.2	-135	
South Australia	658	619	- 5.9	- 52	
Tasmania	. 861	702	-18.5	- 69	

#### Alternative Distributions of Estimated 1982-83 Tax Sharing Grants

(a) Relativities prescribed for 1982-83 under Section 9(5) of the States (Tax Sharing and Health Grants)

Act 1981 differ from existing factors shown in the Commission's report because those in the report
do not take account of the need to add certain amounts to the 'basic' grants for 1981-82 in order
to arrive at new relativities for determining the 1982-83 grants.

The Commission's 1982 report was discussed at the Premiers' Conference held on 24 and 25 June 1982. The Commonwealth put forward the following proposal:

- the Commission's 1982 assessed relativities be modified so that South Australia's and Tasmania's hospital cost sharing grants would not affect their shares of the tax sharing grants;
- the modified relativities be phased-in over three years;
- a guarantee that each State's tax sharing grant would increase by at least two
  per cent in real terms in 1982-83 and a further one per cent in real terms
  in 1983-84 and 1984-85;
- the escalated value of the amounts the Commonwealth made available in 1981-82 (as a contribution towards assisting in the adjustment to new relativities) and in 1975-76 (in consideration of the transfer of South Australia's and Tasmania's railways to the Commonwealth), totalling about \$149 million, be set aside from the tax sharing pool in 1982-83 and used to fund the guarantee, with any balance being available for distribution among the States.

A condition of the proposal was that no Special Grants be paid during the phasing-in period. The Premiers' Conference adopted the proposals on this basis. No decision was made on a further review to be completed by June 1985.

Tax Sharing Grants in 1982-83 and Subsequent Years

Total tax sharing grants payable to the States in 1982-83, 1983-84 and 1984-85 are to be calculated as follows:

- the total tax sharing grant paid to the States in 1981-82 (excluding the \$9 million additional grant to Queensland in respect of the change in the basis of measuring population) to be expressed as a percentage of total tax collections in 1980-81; and
- that percentage (20.72 per cent) be applied in 1982-83 and in each subsequent year to the previous year's total Commonwealth tax collections to determine the total tax sharing grant payable in the relevant year. The definition of total tax collections for the purposes of these calculations is set down in Schedule 1 of the States (Tax Sharing and Health Grants)

  Act 1981.

Following decisions taken at the June 1982 Premiers' Conference, the States' total share will be divided into two pools, with:

- 20.323 per cent of relevant Commonwealth tax collections to take the form of a 'basic' tax sharing pool; and
- 0.397 per cent of such collections to form a 'supplementary' tax sharing pool
  to be used to assist in moving to the new relativities settled at that
  Conference.

Distribution of Basic Tax Sharing Grants: In 1982-83, 1983-84 and 1984-85 the basic tax sharing pool will be distributed on the basis of State populations at 31 December weighted by the per capita relativities shown in the next table:

Relativities to be Applied for Calculating the Basic Tax Sharing Grants

Year	NSW	Vic.	Qld	WA	SA	Tas.
1982-83	1.01960	1.00000	1.43516	1.54072	1.49634	1.87261
1983-84	1.01880	1.00000	1.48508	1.45686	1.47567	1.75931
1984-85	1.018	1.000	1.535	1.373	1.455	1.646

Calculation of the estimated basic tax sharing grants to the States are as shown below:

Estimates of Basic Tax Sharing Grants to the States for 1983-84

	Particulars	NSW	Vic.	Qld	WA	SA	Tas.	Six State Total
(1)	Estimated population							
	('000 persons) (a)		4 050.3		1 379.6	1 342.3	434.5	15 112.9
(2)	Per capita relativities (b).	1.01880	1.00000	1.48508	1.45686	1.47567	1.75931	
(3)	Row (1) weighted by Row							
	(2)	5 497.5	4 050.3	3 727.7	2 009.9	1 980.8	764.4	18 030.6
(4)	Percentage distribution of Row (3) between							
	States (per cent)	30.48978	22.46332	20.67411	11.14713	10.98608	4.23958	100.0
(5)	Estimated distribution of Basic Tax Sharing							
	Grants (\$ million) (c).	2 500.0	1 841.9	1 695.1	914.0	900.8	347.6	8 199.4

- (a) Projections of resident population at 31 December 1983. Subject to revision.
- (b) Adjustment factor as set out in S. 11A (1) of the States (Tax Sharing and Health Grants) Act 1981 (the Act).
- (c) 20.323 per cent of total Commonwealth tax collections in 1982-83 distributed among the States in accordance with percentage shares set out in row (4) as set out in S. 11B of the Act.

Distribution of Supplementary Grants: These grants are to be distributed as follows:

- (i) amounts are to be set aside from the supplementary pool where necessary to ensure that the sum of each State's basic and supplementary tax sharing grants increases by 2 per cent in real terms in 1982-83 over the previous year (one per cent in real terms in both 1983-84 and 1984-85);
- (ii) any portion of the supplementary pool not used for the purpose of (i) above is then distributed between all the States on the basis of the phased-in relativities effective in the year concerned;
- (iii) the actual amount of the guarantee payment for a State is determined by subtracting the amount for each State resulting from (i) above from the amounts resulting from (ii) above in those cases where the amount in (i) is greater than the amount in (ii);
- (iv) the difference between the total of the actual guarantee payments under (iii) and the total of the amounts set aside from the supplementary pool under (i) is then distributed among those States not in receipt of an actual guarantee payment on the basis of the phased-in relativities effective each year.

Each State's share of the supplementary pool is then equal to the sum of its share of the residual supplementary pool under (ii) and either its guarantee payment under (iii) or its share under (iv).

The total amount of supplementary tax sharing grants distributed in 1982-83 was \$148.9 million. Tasmania's share was \$18.6 million. The estimated amount for 1983-84 was \$358.4 million with Tasmania's share being \$51.0 million.

Tax Sharing Grants 1982-83: Total tax sharing grants for 1982-83 were the sum of the basic tax sharing and the supplementary tax sharing grant. Amounts for each State are shown in the following table:

70 ( 1	Tr.	cı ·	•	1004 04
Lotai	1 ax	Sharing	t-rants.	1982-83

State	Amount (\$m)	Increase over 1981-82 amount (per cent)
New South Wales	2 361.8	16.1
Victoria	1 743.4	16.0
Queensland	1 527.4	21.3
Western Australia	913.1	12.7
South Australia	864.1	13.5
Tasmania	362.8	12.7
Total	7 772.5	16.2

## Special Grants (Section 96 of the Constitution)

Section 96 of the Constitution reads: 'During a period of ten years after the establishment of the Commonwealth and thereafter until the Parliament otherwise provides, the Parliament may grant financial assistance to any State on such terms and conditions as the Parliament thinks fit.'

The Commonwealth Grants Commission was established in 1933 and consists of three members on a part-time basis assisted by a full-time staff. In its third report (1936) it fixed upon the principle of financial need, which was expressed in the following terms: 'Special grants are justified when a State through financial stress from any cause is unable efficiently to discharge its functions as a member of the federation and should be determined by the amount of help found necessary to make it possible for that State by reasonable effort to function at a standard not appreciably below that of other States'. In arriving at its recommendations, the Commission each year makes a detailed comparison of the budget results of the claimant States with those of the non-claimant States.

Prior to the passage of the Commonwealth States Grants Act 1959, the claimant States had been Tasmania, WA and SA. The new formula, evolved under the States Grants Act 1959, had been devised partly in reaction to a claim by Victoria and Queensland to be also considered as claimant States. In effect, the new scale of increased grants under this legislation resulted in the number of claimant States falling to two, WA and Tasmania. The Grants Commission could then have used the accounts of the four non-claimant States to reach a basis for comparison. It finally decided to adopt a two-State standard, based on the budgets of NSW and Victoria. Recent developments have included: the withdrawal of WA as a claimant State from 1968-69; the acceptance of SA as a claimant State from 1970-71; the acceptance of Queensland as a claimant State from 1971-72; the withdrawal of Tasmania as a claimant State from 1974-75; and the withdrawal of SA as a claimant State from 1975-76.

On 11 June 1974 the Premier announced Tasmania's withdrawal as a claimant State for a Special Grant under Section 96 of the Commonwealth Constitution. The announcement was of historic significance for the State for two reasons:

• In 1912-13 Tasmania first obtained a Special Grant under Section 96 of the Commonwealth Constitution and from that time until 1973-74 had received a special grant each year.

In 1933 the Grants Commission was established to examine the claims of
States requesting special grants to assist their revenues. From 1933 until
1973-74 Tasmania had had a continuous association with the Grants
Commission and its determinations had considerably influenced the
State Government's financial policies.

Tasmania's withdrawal from the Grants Commission's Special Grants procedures became operative for the 1974-75 financial year giving the State Treasurer greater freedom in planning the State's finances. However, some of the protection afforded by the special grant against any sudden unexpected deterioration of the State's financial position was lost.

The financial arrangement for the withdrawal was that \$15 million would be added to the State's Financial Assistance Grant for 1974-75 and that the total receipt, including the \$15 million, would become the base for calculating the 1975-76 Financial Assistance Grant. Also, as part of the withdrawal arrangement, Tasmania's 1972-73 and 1973-74 advance special grants were not subject to final adjustment.

For details of the method by which Special Financial Assistance Grants were paid to Tasmania, reference should be made to Year Books prior to the 1976 edition.

# Payments Under the Financial Agreement (1927)

Under the Financial Agreement, which was entered into by the Commonwealth Government and the States in 1927, the Commonwealth Government contributes towards interest and sinking fund payments in respect of State debts existing at 30 June 1927, and towards sinking fund payments in respect of State debts incurred after that date for purposes other than the funding of revenue deficits. The Commonwealth Government's contribution to Tasmania to assist with the payment of interest on State debt was set at an annual sum of \$533 718, to continue until 1985.

The sinking fund contributions made by the Commonwealth Government under the Agreement in respect of State debts vary according to the date and nature of the borrowings. On State debts existing at 30 June 1927, the Commonwealth Government is making sinking fund contributions at the rate of 0.125 per cent a year until 1985 and in respect of cash loans raised for the States since that date, the Commonwealth Government makes sinking fund payments for 53 years at the annual rate of 0.25 per cent. Each State is obliged to make sinking fund payments for corresponding periods at the rate of 0.25 per cent per annum regardless of the date on which the debt was incurred. The only exception is in relation to debt incurred for the purpose of funding revenue deficits. In these instances, the Commonwealth Government makes no sinking fund contributions and the States are obliged to make annual contributions to the sinking fund of not less than four per cent. However, in respect of Treasury Bills issued to cover States' revenue deficits accruing between July 1927 and June 1935, special arrangements were made under which the Commonwealth Government contributes 0.25 per cent per annum on the amount outstanding until June 1983.

Recent Commonwealth Government sinking fund contributions in respect of the Tasmanian public debt are shown in the following table:

Commonwealth Government Contributions to National Debt Sinking Fund: Tasmanian Debt (\$'000)

Year	Amount	Year	Amount
1977-78	2 225	1980-81	2 675
1978-79	2 386	1981-82	
1979-80	2 544	1982-83	

The acceptance of some Commonwealth Government liability for interest and sinking fund payments on State debts was only one part of a more extensive agreement setting up an Australian Loan Council and a National Debt Sinking Fund. The raising of loan money for the States under the Agreement is described later in this chapter.

# New Assistance for Debt Charges

At the 1970 February Premiers' Conference, the Commonwealth Government announced it was prepared to take over State debt totalling \$1 000 million during the five-year period 1970-71 to 1974-75. However, this would have necessitated amendments to the 1927 Financial Agreement and caused considerable delay. The Commonwealth Government then proposed an alternative which involved grants to the States equal to interest on specific parcels of State debt. The distribution between the States was in proportion to Commonwealth Government securities on issue on behalf of each State at 30 June 1978.

The 1927 Financial Agreement, brought into effect by the *Financial Agreement Act* 1928, was amended during 1975-76 with retrospective effect from 30 June 1975. The total of \$1 000 million of State debt was formally transferred to the Commonwealth.

# Grants for Non-reproductive Capital Works

To assist the States in meeting their capital works programs since 1970-71, the Commonwealth Government has provided annual grants for financing non-reproductive capital works. Total approved borrowing programs from 1976-77 to 1982-83 have been (in \$ million): 1976-77, 1 356; 1977-78, 1 434; 1978-79, 1 434; 1979-80, 1 245; 1980-81, 1 307; 1981-82, 1 307; and 1982-83, 1 373. The proportion of the total States' capital works program provided by Commonwealth Government grants in this period has been 33.3 per cent.

Distribution of the grants was by agreement between the States or by the Commonwealth Government if the States failed to reach agreement. Tasmania's share of the 1982-83 grant was \$32.1 million which was credited to the State's Loan Fund.

The provision of these grants reduces the amount which the State needs to borrow in order to carry out its capital works program and eases the burden of debt charges (interest payments and sinking fund contributions) on the Consolidated Revenue Fund.

#### Commonwealth Government Aid for Roads

Financial assistance to the States for roads during the triennium 1977-78 to 1979-80 was mainly provided under the Commonwealth State Grants (Roads) Act 1977. The Act was based on the former Commonwealth Bureau of Roads' Report on Roads in Australia 1975. The Commonwealth Government decided to make \$475 million available to the States in 1977-78 and the total grants in 1978-79 and 1979-80 would be equivalent in real terms to the 1977-78 grant. The legislation also established expenditure quotas for each State to be met from its own funds.

Over the five years 1980-81 to 1984-85, the Commonwealth is to provide \$3 650 million to the States and the Northern Territory as grants for road construction and maintenance. Estimated payments to the States during 1982-83 were \$709 million (7.2 per cent higher than the 1981-82 payments of \$662 million).

The Commonwealth also provides aid to the States for planning and research projects related to roads. For the three years 1977-78 to 1979-80 the assistance was paid under the *Transport Planning and Research (Financial Assistance) Act* 1977. For 1977-78 the Commonwealth met two-thirds of the expenditure on approved programs of projects and has met one half of such expenditure in subsequent years. Following the recent Review of Commonwealth Functions, Commonwealth assistance for this purpose was terminated at the end of 1980-81.

#### Assistance Related to South-West Tasmania

The Commonwealth Government is providing compensation to Tasmania following the termination of the Gordon River Power Development Stage Two. Financial assistance is related to alternative employment projects for contractors and employees who cannot be redeployed to alternative projects in the short term. Estimated assistance payments for 1983-84 were \$27.0 million.

## Loan Council (Financial Agreement)

The original Financial Agreement was made on 12 December 1927, but Tasmania did not become a party to it until 1 July 1928. The basic intention of the agreement was a co-ordinated approach to the loan market, the establishment of sound sinking fund arrangements and the sharing of State debt charges with the Commonwealth Government. The main provisions are summarised below:

• The Commonwealth Government assumed certain liabilities in respect of State debts (see previous section on interest and sinking fund payments made by the Commonwealth Government in respect of Tasmanian State

debt-'Payments under the Financial Agreement 1927').

The Australian Loan Council was set up to co-ordinate the public borrowings of the Commonwealth Government and the States. It consists of the Prime Minister (or his nominee) as chairman, and the State Premiers (or their nominees). Each financial year the Commonwealth Government and the States submit programs to the Loan Council setting out the amounts they desire to raise by loan during the next year. Revenue deficits to be funded are included in the borrowing programs but borrowing by the Commonwealth Government for defence purposes is excluded from the terms of the agreement.

If the Loan Council decides that the total amount of the loan programs for the year cannot be borrowed at reasonable rates and conditions, it then decides the amount which shall be borrowed and may, by unanimous decision, allocate that amount between the Commonwealth Government and the States. In default of a unanimous decision, the Commonwealth Government is entitled to one-fifth of the total amount to be borrowed and each State to a proportion of the remainder equal to the ratio of its net loan expenditure in the preceding five years to the net loan expenditure of all States during the same

period.

Subject to the decisions of the Loan Council, the Commonwealth Government arranges all borrowings, including those for conversions, renewals and redemptions. However, the Commonwealth Government or a State may borrow for 'temporary purposes' by way of overdraft or fixed deposit, subject to limits fixed by the Loan Council. In addition, the Commonwealth Government may borrow within Australia, or a State within its own territory, from authorities, bodies, institutions, or from the public by counter sales of securities, subject to Loan Council approval. Commonwealth Government securities are issued for money borrowed in this way and amounts so borrowed are treated as part of the borrowing program for the year.

The agreement involved setting up a National Debt Commission to administer
one consolidated sinking fund in respect of the debt of the Commonwealth Government and the States. Sinking fund moneys are used
to redeem unconverted securities at maturity and to re-purchase

securities on the stock market.

• It was realised at the inception of the Loan Council that, in the interests of co-ordinated borrowing, the Council should be advised of borrowings of large amounts by semi-government authorities (such loan raisings do not form part of State or Commonwealth Government debt and therefore are not within the scope of the original agreement). A set of rules evolved in 1936 is regarded as the 'Gentlemen's Agreement' and makes provision for the submission to the Council of annual loan programs in respect of larger semi-government and local government authorities (in conjunction with the loan programs of the governments concerned) and for the fixing of the terms of individual loans coming within the scope of the annual program. At the June 1982 meeting of the Loan Council it was agreed that for a trial period of three years the

level of domestic borrowing by major electricity authorities (including the Hydro-Electric Commission) would be determined by the respective State Governments. Overseas borrowings by electricity authorities continue to be subject to Loan Council approval. For other larger semi-government and local government authorities (those borrowing more than \$1.2 million) Loan Council approval would be required. In 1981-82 the only Tasmanian authority which came within the scope of Council approval was the HEC with a borrowing program of \$34.4 million

It should be emphasised that the Australian Loan Council does not itself raise money for Tasmanian semi-government and local government authorities; its concern is to assess the total impact of government borrowing for the year and then to fix ceilings for semi-government and local government authorities in the interests of a co-ordinated program.

The following table shows Loan Council borrowings undertaken on behalf of the State of Tasmania to finance new capital works:

Tasmania: New Cash Borrowings Authorised by Australian Loan Council (a) (\$'000)

Year	Amount	Year	Amount
1977-78	66 992	1980-81	 61 080
1978-79	66 992		 61 080
1979-80	58 171		 64 151

(a) For State works programs; amounts credited to State Loan Fund.

The previous table excludes allocations under the Commonwealth Government and State Housing Agreements, which were also part of the Loan Council's program. The following table shows allocations to Tasmania for housing purposes:

Tasmania: Allocations for Housing (\$'000)

Year	Amount	Year	Amount
1977-78	25 220	1980-81	10 770
1978-79	20 436	1981-82	
1979-80	10 352	1982-83	8 407

#### STATE FINANCIAL TRANSACTIONS

#### Tasmanian Public Account

The State Public Account includes the Consolidated Revenue Fund, the Trust and Special Funds, and the Loan Fund. Revenue from State taxation, Commonwealth Government financial assistance grants and other departmental sources is paid into the Consolidated Revenue Fund. Main expenditures from it are for education, health and hospitals, roads, law and order, public debt charges, and subsidies to State business undertakings. The Trust and Special Funds cover special transactions outside the ordinary operations of departmental expenditure, such as funds from the Commonwealth Government for specific purposes and moneys held for expenditure by the State at some future time. The Loan Fund receives its funds from public borrowings and grants, and the main expenditure is on State public works and on advances to State business undertakings.

A summary of transactions on the Tasmanian Public Account is given in the following table:

Public Account:	Summary	of	Transactions,	Tasmania
	(\$'(	ากก	۸	

Particulars	1979-80	1980-81	1981-82	1982-83
Cash and investments at beginning of year	19 734	15 918	13 090	4 773
Receipts—				
Consolidated Revenue Fund Borrowings for new capital	560 192	620 307	683 231	764 990
purposes	58 171	61 080	61 080	54 071
Other Loan Fund receipts Net increases, Trust and Special	58 677	54 751	52 369	69 541
Funds	1 566	2 792	9 933	13 343
Total	678 606	733 346	806 613	901 945
Expenditure—				
Consolidated Revenue Fund (a) Loan Fund, public works and	560 617	627 441	717 628	772 735
purposes	121 805	(b) 108 734	(b) 97 302	(b) 97 447
Total	682 422	736 175	814 930	870 182
Percentage increase	11.1	7.9	6.8	6.8
Cash and investments at end of year	15 918	13 090	4 773	36 535

<sup>(</sup>a) Excludes \$3.3m transferred to Loan Fund.

The State Public Account is a complete record of the Government's operation of three specific funds, i.e. Consolidated Revenue, the Trust and Special Funds, and the Loan Fund. It is by no means a complete record of government activity, since statutory authorities and semi-government authorities such as the Hydro-Electric Commission and Transport Tasmania carry on financial operations which are not recorded in the State Public Account. In a later section of this chapter under the heading 'Exclusions from Consolidated Revenue', the relationship between the finances of the principal authorities and the Consolidated Revenue Fund is described; the general principle is that gross receipts and expenditure of the authorities are excluded from the Public Account.

In the following table are shown the balances credited to each fund constituting the Public Account and the form in which the balances are held:

Public Account: Summary of Balances at 30 June, Tasmania (\$'000)

		Ва	Balance			Location			
Year	Accum- ulated Revenue Account	Loan Fund	Trust and Special Funds	Total	Cash in Treasury or bank	Advanced to depart- ments	Govt. and other securi- ties (a)	Total	
1978	6 443	265	18 571	12 393	- 8 849	1 454	19 788	12 393	
1979	2 332	1 679	20 387	19 734	-11153	1 435	29 452	19 734	
1980	6 057	21	21 954	15 918	- 8 138	1 400	22 656	15 918	
1981	7 133	1 062	19 162	13 090	- 7 637	1 360	19 367	13 090	
1982	34 397	10 075	29 095	4 773	-17638	1 291	21 119	4 773	
1983	7 745	1 842	42 438	36 535	-16533	1 512	51 558	36 535	

<sup>(</sup>a) Includes fixed deposits.

<sup>(</sup>b) Excludes transfers from Loan Fund for deficit funding: 1980-81, \$6.057m; 1981-82, \$7.133m; 1982-83, \$34.397m.

In the previous table, 'Accumulated Revenue Account' is a suspense account recording accumulated surpluses and deficits in the Consolidated Revenue Fund, and also the funding of deficits. Details of the account are as follows:

Accumulated	Revenue	Account:	Summary	of	Transactions,	Tasmania
		(	(\$°000)			

	Transactions					
Year	Opening balance	Budget result, Consolidated Revenue	Deficits charged to Loan Fund (a)	Closing balance		
1977-78 1978-79 1979-80 1980-81 1981-82 1982-83	+ 1 583 - 6 443 - 2 332 - 6 057 - 7 133 - 34 397	- 6 443 + 2 861 - 3 725 - 7 133 - 34 397 - 7 745	- 1 583 + 1 250  + 6 057 + 7 133 + 34 397	- 6 443 - 2 332 - 6 057 - 7 133 - 34 397 - 7 745		

(a) See later section in this chapter 'Deficit Funding'.

In the following section dealing with Consolidated Revenue, Treasury practice of eliminating special grant adjustments from Consolidated Revenue total receipts has been followed.

#### Consolidated Revenue Fund

#### General

The financial transactions of the State of Tasmania are recorded under: Consolidated Revenue: Trust Funds: and Loan Fund.

Payments from Consolidated Revenue are made only on the basis of authority found in: the annual Appropriation Act of Parliament; Acts of the Parliament made in previous years and under which certain annual payments are classified as 'reserved by law'; and the *Public Account Act* 1957 (as amended in 1962) and the *Audit Act* 1918.

The third category of authority listed above is designed to give the Treasurer and the Government some flexibility in public expenditure since the Appropriation Act cannot be expected to anticipate, to the nearest dollar, the expenses that are likely to be incurred for each and every item. The relevant sections of the amended Public Account Act are 5A and 5B. These provide that, in relation to Consolidated Revenue, the Treasurer may authorise transfers between votes within certain sub-divisions of the appropriation and, on the authority of the Governor, supplement certain appropriations and provide funds to meet expenditure for which no other provision exists. Transfers, as described under 5A, are a matter for the Treasurer but additional expenditure, as described under 5B, needs ratification by Parliament before the close of the following financial year. Regulations 20 and 21 of the second schedule of the Audit Act provide for expenditure by the Treasurer to meet emergencies for which no vote exists; the Governor must first authorise such expenditure and the Auditor-General investigate the circumstances before payment can be made.

# Exclusions from Consolidated Revenue

It should be observed that the Consolidated Revenue Fund does not include all revenue and expenditure in respect of activities undertaken or authorised by the State Government. Some moneys are paid directly into State Trust Funds; e.g. Commonwealth Government assistance for roads is paid into the State Highways Trust Fund and the various expenditures on roads are made directly from that Fund. The gross receipts and payments of a number of State business undertakings and State authorities are excluded from the Consolidated Revenue Fund, their relation to the Fund being as follows:

- The net loss incurred by Transport Tasmania each year is met from the Consolidated Revenue Fund. The Department's net loss occurs principally in respect of government shipping services which it administers. The Department's gross receipts and expenditure are excluded from the Fund.
- Omnibus services in Hobart, Launceston and Burnie are operated by the Metropolitan Transport Trust. The *net* annual loss of the authority is a charge against Consolidated Revenue. Annual payment of debt charges on Government advances is credited to the Fund.
- The gross receipts and expenditure of the Hydro-Electric Commission are excluded from the Consolidated Revenue Fund. However, the annual payment of debt charges by the Commission is credited to the Fund. Net profit or loss on the Commission's activities is carried forward in the authority's own suspense account. From 1971-72 the Commission has been required to pay an annual contribution to Consolidated Revenue. The amount was five per cent of the total revenue derived from retail sales of electricity in the preceding year, until January 1977, when it was reduced to 2½ per cent and eventually eliminated from January 1978. However, the five per cent tax on revenue was re-introduced in January 1979.
- Also excluded from the Consolidated Revenue Fund are the gross receipts and
  payments of: regional water schemes, Government Printing Office,
  Government Insurance Office, Public Trustee, State housing authorities,
  etc. In accordance with various acts, it is usual for the net profits or
  losses of the previous year to be paid to or from the Consolidated
  Revenue Fund for the current year. Debt charges on Government money
  loaned to the authorities are paid to Consolidated Revenue.

# Consolidated Revenue Fund—Summary

The following table shows the transactions of the Tasmanian Consolidated Revenue Fund, the surplus or deficit, and the aggregate deficit at the end of each year:

# Consolidated Revenue Fund: Surpluses and Deficits, Tasmania (\$'000)

Year	Revenue	Expenditure	Budget result	Aggregate funded deficit at end of year
1977-78	444 263	450 706	- 6 443	48 351
1978-79	495 822	492 961	+ 2861	45 490
1979-80	560 192	563 917	- 3725	49 214
1980-81	620 307	627 441	- 7 133	56 348
1981-82	683 231	717 628	- 34 397	90 745
1982-83	764 990	772 735	- 7745	98 490

# Deficit Funding

At 30 June 1983 the sum of \$98 490 000 had been charged against the Loan Fund as 'revenue deficits funded'; \$7 745 000 was carried as a negative balance in the Accumulated Revenue Account.

#### Consolidated Revenue Fund—Receipts

The following table shows Tasmanian Consolidated Revenue Fund receipts for recent years:

# Consolidated Revenue Fund: Receipts, Tasmania (\$'000)

Item	1980-81	1981-82	1982-83
Commonwealth Government sources—			
Financial agreement	534	534	534
Income tax entitlement	298 602	322 031	362 778
Education	14 221	14 813	17 172
Health (a) (b)	51 496	52 826	56 331
Social welfare	704	32	164
Local Government	9 624	11 227	13 582
Other services		307	338
Total	375 181	401 770	450 899
Debt charge recoveries (c)—			
Interest	55 697	63 268	77 579
Sinking fund	5 651	5 829	6 122
Total	61 348	69 097	83 701
State taxation (d)	129 216	150 230	149 822
Victorian Lotteries Agreement	4 953	8 737	10 455
Territorial revenue—			
Forestry	11 164	12 232	11 501
Other property income, etc.	8 263	7 909	7 547
Total	19 428	20 141	19 047
Departmental revenue, fees, etc.—			
Education	433	569	660
Health	3 998	4 419	4 945
Law and order	5 410	6 262	7 417
Tourism	1 269	1 507	1 511
Other (e)	19 071	20 499	36 533
Total	30 181	33 256	51 066
Grand total	620 307	683 231	764 990
Percentage increase	10.7	10.1	12.0

<sup>(</sup>a) Includes receipts under the Medibank agreement: 1980-81, \$42 604 000.

#### State Taxation

During 1982-83 the chief State taxes, in order of importance were: pay-roll tax; motor taxes; stamp duties (on cheques, legal documents, etc.); land tax; and liquor tax and licences. Pay-roll tax, which was handed over to the State by the Commonwealth Government from the 1971-72 financial year, has now become by far the largest single source of State tax revenue.

In the following tables, the figures shown for total taxes paid to Consolidated Revenue do not agree with those published by the State Treasurer. Excluded from the tables are amounts received from the Victorian Government under the Victorian Lotteries Agreement while 'motor taxes' includes amounts not treated as taxes by the State Treasurer.

The following table gives a summary for a three-year period of State taxation taken into the Consolidated Revenue Fund:

<sup>(</sup>b) Includes public hospital running cost grants: 1981-82, \$42 361 000; 1982-83, \$45 253 000.

<sup>(</sup>c) Mainly on advances made to semi-government authorities.

<sup>(</sup>d) See later section 'State Taxation'.

<sup>(</sup>e) Includes transfers from the Loan Fund and the State Highways Trust Fund relating to the Department of Main Roads and Construction.

State Taxatio	n Callections	Paid into	Consolidated	Revenue	Tacmania

Tax or licence	1980-81	1981-82	1982-83		
			Amount	Per cent	
	\$'000	\$,000	\$,000		
Pay-roll tax	52 056	56 207	55 909	35.9	
Motor taxes	29 313	33 613	32 704	21.0	
Stamp duties (a)	21 004	24 073	21 297	13.7	
Land tax	6 110	6 410	7 991	5.1	
Liquor tax and licences	5 325	5 759	6 067	3.9	
Deceased persons' estates duties	3 030	3 288	2 600	1.7	
Racing taxes	3 529	3 984	3 984	2.6	
Casino tax and licence fees	2 978	3 106	3 318	2.1	
Hydro-Electric Commission statutory levy	3 705	4 621	5 185	3.3	
Business franchise—tobacco	1 796	4 453	5 173	3.3	
Petroleum products	_	4 336	10 930	7.0	
Soccer Football Pools tax	355	265	648	0.4	
Other licences	15	17	17		
Total (b)	129 216	150 132	155 823	100.0	

<sup>(</sup>a) Excludes: stamp duties on bookmakers' tickets (included in 'Racing taxes'); stamp duty on third party insurance (included in 'Motor taxes'); and stamp duty on motor vehicle registrations (included in 'Motor taxes').

Motor Taxes: In the preceding table motor taxes are shown as \$32,704,000 for the year 1982-83. The next table shows how this figure can be reconciled with motor tax figures published by the State Treasurer:

Motor Taxes (a) Paid to Consolidated Revenue Fund, Tasmania 1982-83 (\$'000)

Item	Amou	nt
Motor taxes  Less Stamp duty on—Vehicle registration (a)  Third party insurance (a)  Traffic fees (b) paid to—Police Department  Consolidated Revenue Fund	9 349 547 3 242 2 435	32 704 15 574
'Motor tax' as published by State Treasurer		17 130

<sup>(</sup>a) Treated as 'stamp duties' tax items by the State Treasurer.

Not all State taxation is paid into the Consolidated Revenue Fund, as shown in the following table:

State Taxation Collections Paid to Special Funds, Tasmania (\$'000)

1-82 1982-83
135 130
388 430
404 1 295
927 1 855

<sup>(</sup>b) Excluded are the following amounts received from the Victorian Government under the Victorian Lotteries Agreement: 1980-81, \$4 953 000; 1981-82, \$8 736 907; 1982-83, \$10 455 172.

<sup>(</sup>b) Includes motor vehicle registration fees, drivers' licences, charges for number plates, transfer of ownership fees and learners' permits.

# Debt Charge Recoveries

After Commonwealth Government grants and State taxation, debt charge recoveries is the next largest receipt item in Consolidated Revenue. The next table shows details of the interest and sinking fund payments made by various authorities on advances which have been made to them by the State Government. These advances have been made primarily from State loan borrowings and the Government attempts to recover amounts roughly equal to its liability for debt charges.

Debt Charge	Recoveries:	Consolidated	Revenue	Fund,	Tasmania
		(\$'000)			

	(+ -	/				
		Interest		Sinking	fund conti	ibutions
Source of recovery	1980-81	1981-82	1982-83	1980-81	1981-82	1982-83
Agricultural Bank	1 862	2 032	2 294			_
Herd Improvement Board	49	61	88	5	13	7
Forestry Department	1 650	1 956	9 778	_	_	_
Government Printing Office	31	21	27	3	3	3
Housing Department	2 747	3 267	7 392	361	405	462
Hydro-Electric Commission	41 154	45 479	51 019	4 866	4 970	5 195
King Island Abattoirs Board	41	44	35	5	5	5
Loans to industry—						
Iron ore (Savage River agreement)	121	108	94	_		_
Other	1 072	1 115	1 002	_		
Metropolitan Transport Trust	337	365	395	40	40	40
Metropolitan Water Board	1 347	1 464	1 619	171	170	170
Rivers and Water Supply Commission	402	500	636	54	53	52
Tasmanian Grain Elevators Board	108	129	142	17	17	17
Tourism Development	465	510	567	_	_	_
Transport Department North-West Regional Water	810	822	945	71	72	73
Authority	551	762	908	55	74	92
Marine Board of King Island	94	94	94	_		_
Midway Point Improvement Act						
1975	240	215	_	where=	_	_
Public Bodies Assistance Act 1971	237	303	320	_	_	
Other	2 380	4 021	224	4	6	5
Total	55 697	63 268	77 579	5 651	5 829	6 122

# Public Debt Charges

A significant item of expenditure is public debt charges, but a high proportion is recovered from semi-government authorities. The next table shows the net burden on Consolidated Revenue Fund of debt charges:

Public Debt Charges: Net Burden on Consolidated Revenue, Tasmania (\$'000)

		Interest	_	Sinking	ribution	
Particulars	1980-81	1981-82	1982-83	1980-81	1981-82	1982-83
Expenditure from Consolidated Revenue—	(a) 87 665	(a) 99 153	(a) 112 938	(b) 9 466	(b) 10 068	(b) 10 677
Recovered from semi-government bodies, etc.	55 697	63 268	77 579	5 651	5 829	6 122
Net burden on Consolidated Revenue (c)	31 968	35 885	35 359	3 815	4 239	4 555

<sup>(</sup>a) Includes loan management charges.

<sup>(</sup>b) Contribution payable under the Financial Agreement to the National Debt Sinking Fund.

<sup>(</sup>c) In respect of non-revenue producing assets such as schools, roads, etc.

### Government Transport Services

Unlike the Consolidated Revenue Funds of some Australian States, the Tasmanian Fund excludes the *gross* receipts and expenditure of State business undertakings such as shipping and bus services. The principal charge in 1982-83 under this item was in respect of the *net* loss incurred by Transport Tasmania during 1981-82 (\$4 289 001). Another major item was a contribution of \$9 755 000 to the Metropolitan Transport Trust which experienced a net trading loss of \$7 822 582 in 1982-83.

### Roads and Bridges

The chief expenditure under this item in 1982-83 was a transfer of \$26 967 936 to the State Highways Trust Fund, representing revenue received from motor tax and public vehicles fees. Grants totalling \$2 592 000 were paid from Consolidated Revenue Fund to Transport Tasmania to cover the cost of vehicle registration and traffic control.

### State Trust and Special Funds

State revenues are payable to Consolidated Revenue with the exception of certain revenues which have been set aside by acts of Parliament for specific purposes and which are payable into special funds or accounts at the State Treasury. The volume of these transactions is high, \$586 137 662 being received in 1982-83, \$572 794 378 being expended, and the balance in the funds changing from \$29 095 086 (1 July 1981) to \$42 438 370 (30 June 1983).

It should be noted that many accounts in the Trust and Special Funds indicate Treasury transactions which merely reiterate those recorded under Consolidated Revenue and Loan Funds; examples include, Income Tax Deductions Suspense account, Tasmanian University (Commonwealth Grants) Account and Recurrent Grants to Non-Government Schools Account.

In the case of some accounts, there is provision for crediting the Trust and Special Funds with contributions from Consolidated Revenue, an important example being the State Highways Trust Fund:

State Trust and Sp	pecial Funds:	State	Highways	Trust	Fund,	Tasmania,	1982-83
		(	S'000)				

Item	Receipts	Expenditure
Commonwealth Government contribution	35 526	
Grants from Consolidated Revenue	26 967	· <u>·</u>
Miscellaneous receipts and refunds	1 552	64 261
Self-balancing entries	10 551	10 119
Fund entries	74 596	74 380

### State Loan Fund

Expenditure from the Loan Fund is devoted to two main purposes: the making of advances to State semi-government authorities; and the carrying out of the State's own works program. Such funds, whether lent to other authorities for their works programs or spent directly by the State, result in the creation of new capital assets, a large proportion of which are revenue earning and therefore capable of reimbursing the State for the debt charges which it has incurred. (An earlier section on Consolidated Revenue expenditure shows the gross and net expenditure on annual debt charges.) In addition, conversion of existing loans is effected from the Loan Fund, but the amounts involved have been excluded from the next two tables as these transactions only alter the rates, sources or terms of existing public debt.

In addition to money from loan raisings, the Loan Fund may record other receipts such as the repayment of advances which had been made from the Fund to some Government authorities and community organisations, and contributions to capital works by the Commonwealth Government.

Receipts into the Loan Fund are shown in the following table:

State	Loan	Fund:	Receipts,	Tasmania
		(\$2	000)	

Particulars	1980-81	1981-82	1982-83
Loans raised for new capital purposes  Loans raised for redemption and conversion (a)  Non-specific grants from Commonwealth Govern-	61 080 189 048	61 080 159 352	54 071 225 956
ment	30 539	30 539	32 076
Total	280 667	250 971	312 103
Specific grants from Commonwealth Government—			
Education	8 160	7 238	2 144
Health and mental health	5 028	3 125	7 589
Urban public transport	1 178	72	110
Other	1 629	1 534	1 567
Total	15 994	11 969	11 410
ayments from State sources (b)—			
Hydro-Electric Commission Act	_		15 000
Apple and Pear Marketing Act 1977	200	1 000	_
Industrial Development Act	1 664	1 837	1 308
Transport Act	76	67	32
State Advances Act	1 266	1 197	889
Homes Act	90	596	630
Tourist accommodation and facilities loans	376	182	363
Sale of government properties	450	501	44
Other	4 095	4 480	7 790
Total	8 217	9 860	26 056
Total Loan Fund receipts	304 878	272 801	349 567

<sup>(</sup>a) For the redemption and conversion of existing loans.

The following table shows annual gross and net loan expenditure. The net loan expenditure for 1982-83 (\$54.1m) was 60.1 per cent less than for 1981-82.

Loan Fund: Gross and Net Loan Expenditure, Tasmania (\$'000)

V	Loan exp	enditure	**	Loan expenditure		
Year	r Year Gross Net	Gross	Net			
1977-78	123 647	104 920	1980-81	116 005	91 793	
1978-79	122 544	99 167	1981-82	106 830	135 557	
1979-80	121 979	92 387	1982-83	61 080	54 071	

Traditionally, loan expenditure has been recorded on both gross and net bases. The annual net loan expenditure is equal to the disbursement of borrowings during the year for new capital purposes (as distinct from borrowings for the conversion of existing debt), plus capital contributions by the Commonwealth Government, augmented or diminished by the net movement in the Loan Fund balance. The following table shows the calculation of net loan expenditure from two viewpoints: as a residue from gross loan expenditure; and as the algebraic sum of new loan raisings for new capital purposes, the net movement in the Loan Fund balance and discount and capital appreciation expenses.

<sup>(</sup>b) Payments and repayments under provisions of various State Acts.

Particulars	1980-81	1981-82	1982-83
Gross loan expenditure—	116 005	106 830	135 557
Less Repayments	8 217	9 860	26 056
Less Commonwealth Government specific grants.	15 994	11 969	11 410
Net loan expenditure	91 793	85 001	98 091
Gross borrowings for new capital purposes—	61 080	61 080	54 071
Commonwealth Government non-specific grant	30 539	30 539	32 076
Movement in Loan Fund balance (a)	-1 041	-9013	+8 232
Transfer from Consolidated Revenue Fund			
Transfer from Accumulated Revenue Account			_
Other (b)	1 215	2 395	3 710
Net loan expenditure	91 793	85 001	98 091

State Loan Fund: Calculation of Net Loan Expenditure, Tasmania (\$'000)

The Public Account Act 1962 has, amongst other things, the following provisions relating to the Loan Fund: the Governor, on Treasury advice, may make transfers between block votes as long as the total authorised amount is not exceeded; a sum of up to \$400 000 may be spent for purposes not previously authorised; for purposes previously authorised, an additional sum of up to \$1m may be spent; in instances of expenditure outside the provisions of a specific Loan Fund Appropriation Act, the ratification of such action must be sought from Parliament before the close of the following financial year. The Act also provides for the unexpended balances of votes at the close of the financial year to lapse.

### State Public Debt

Prior to 1 July 1975, the State public debt was calculated on two bases: with overseas debt calculated at 'mint par of exchange' i.e. at the exchange rates prevailing on 1 July 1927; and with overseas debt calculated at current rates of exchange. 'Mint par debt' was the official debt for the purpose of determining sinking fund contributions payable under the 1927 Financial Agreement. This Agreement was amended at the end of June 1975 and a new formula was applied for determining sinking fund contributions. 'Mint par debt' is no longer used in the calculations.

The growth of the public debt, expressed at current rates of exchange (as at 30 June for year shown), is shown in the following table:

State Public Debt: Place of Flotation and Interest Payable, Tasmania (\$'000)

Debt redeemable in—

At 30 June	Debt redeemable in—						Interest
	London	New York	Canada	Nether- lands	Australia	debt	payable
1978	1 977	2 439	449	252	864 980	870 097	68 233
1979	1 234	1 895	389	213	918 827	922 559	73 604
1980	1 295	1 410	364	145	966 735	969 948	80 205
1981	1 080	1 119		53	1 018 553	1 020 804	91 494
1982	117	940		_	1 070 548	1 071 606	105 333
1983	121	728	_	_	1 113 548	1 114 397	116 405

<sup>(</sup>a) Negative sign (-) indicates an increase from opening to closing balance, plus sign (+) indicates a decrease.

<sup>(</sup>b) Discount on borrowings for conversion and re-financing purposes and capital appreciation items.

A notable feature of the State Public Debt is that approximately 99 per cent of indebtedness is now domiciled in Australia. There has been a gradual change from the situation which existed a century ago when nearly all loans were financed in London.

### Public Debt Transactions

Securities in the form of bonds, inscribed stock and debentures are issued by the Commonwealth for and on behalf of Tasmania. Under the Financial Agreement of 1927, redemption and conversion of loans is carried out by the National Debt Sinking Fund Commission.

In 1975, with the amendment to the Agreement of 1927, a new base for the provision of sinking funds by the States was established. The agreement, which continues until 1985, provided for a base payment by Tasmania of \$7 million per annum. For the period to 1985, Tasmania's contribution to the Sinking Fund has been increased or reduced by 1.2 per cent per annum of the amount by which the public debt thereafter is increased or diminished.

The following table shows particulars of loans raised and redeemed annually during the most recent four-year period expressed at current rates of exchange. It will be observed that redemption of loans falling due in any particular year is achieved, in the main, by conversion (i.e by renewal of the original loans on new terms and conditions).

State Public Debt: Conversion and Redemption at Current Rates of Exchange, Tasmania (\$'000)

Particulars	1979-80	1980-81	1981-82	1982-83
Loans raised for— New capital purposes Conversion purposes Redemption of maturing loans	58 267 4 130 58 401	61 579 960 188 804	62 278 960 160 342	54 982 1 900 229 668
Total raisings	120 798	251 343	223 580	286 550
Less Loans redeemed— By conversion From new cash raisings From National Debt Sinking Fund (a)	4 130 58 324 10 954	960 187 737 11 790	960 159 146 12 672	1 900 225 956 15 903
Net increase in public debt	47 389	50 856	50 802	42 791
Debt at end of year	969 948	1 020 804	1 071 606	1 114 397

<sup>(</sup>a) Includes a balancing item due to fluctuation in exchange rates during the year, the actual redemption being \$10 964 000 in 1979-80, \$11 540 000 in 1980-81, \$12 784 000 in 1981-82 and \$15 118 000 in 1982-83.

The next table summarises the transactions of the National Debt Commission in relation to the Tasmanian Public Debt:

National Debt Commission Transactions in Respect of Tasmanian Public Debt (\$'000)

Particulars	1979-80	1980-81	1981-82	1982-83
Balance at beginning of period	457	970	1 587	1 702
From— Commonwealth Government	2 544	2 675	2 816	2 958
State Government	8 903	9 466	10 069	10 677
Interest received (net)	29	16	14	15
Funds available	11 934	13 127	14 487	15 353
rates of exchange	10 964	11 540	12 784	15 118
Balance at end of period	970	1 587	1 702	235

The National Debt Commission was established as part of the 1927 Financial Agreement and its function is to administer a single consolidated sinking fund in respect of the debt of the Commonwealth and State Governments. (The obligations of the States and the Commonwealth Government in contributing to the consolidated sinking fund are set out earlier in this chapter in a section headed 'Payments Under the Financial Agreement (1927)'.)

### STATE TAXATION

In the section on the Consolidated Revenue Fund, taxes collected by the Tasmanian Government are shown in summarised form.

The next table gives full details of State taxation. It should be noted that certain taxes are reserved for special purposes. Examples are: motor taxation—the 'motor tax' and 'public vehicle fees' components of this item are passed from Consolidated Revenue to the State Highways Trust Fund; and racing and gaming taxes—all racing and gaming taxes paid to special funds are passed to the racing clubs.

State Taxation Collections, Tasmania (a) (\$'000)

Tax	1980-81	1981-82	1982-83
Deceased persons' estates duties	3 030	3 288	2 600
Stamp duties (excluding bookmakers' tickets)—		2 200	2000
Cheques	1 691	2 435	2 538
Hire purchase and related agreements	2 924	3 164	2 455
Loan duty	1 777	2 954	684
Legal documents, etc.	9 443	8 968	9 362
Adhesive revenue stamps	375	483	453
Insurances	4 424	5 653	5 536
Marketable securities	370	416	268
Land tax	6 110	6 410	7 991
Motor taxation—		0 .10	. , , , ,
Paid to—Consolidated Revenue	29 313	33 613	32 704
Special funds	422	523	560
Levy paid to fire authorities (b)	5 825	5 296	7 600
Liquor tax and related licences (c)	5 325	5 759	6 067
Racing and gaming taxes—		5 .07	0 007
Paid to—Consolidated Revenue	3 529	4 084	3 984
Adjustment (d)	+76		_
Special funds	1 373	1 404	1 295
ay-roll tax	52 056	56 207	55 909
Hydro-Electric Commission statutory levy	3 705	4 621	5 185
Casino tax and licence fees	2 978	3 106	3 318
Soccer football pools tax	355	265	648
Business franchise—Petroleum tax	_	4 334	10 930
Tobacco tax	1 796	4 453	5 173
Other sundry licences	15	17	17
Total	136 912	157 453	165 277
Percentage increase	14.6	15.0	5.0

<sup>(</sup>a) Collections from all sources of taxation, including amounts paid to special funds.

### State Land Tax

The Government announced in the 1982 Budget that land tax on principal residence and rural land was to be re-introduced. Legislation to give effect to the decision was the Land and Income Taxation Amendment Act (No. 78 of 1982) and the Land Tax Act (No. 77 of 1982). The latter Act fixed the land tax rate scales for each of the categories:

<sup>(</sup>b) Paid by insurance companies direct to the Fire Brigades Commission and the Rural Fires Board until 31 October 1979. As from 1 November the amount was paid to the State Fire Commission.

<sup>(</sup>c) See later section 'Fees and Licences under the Licensing Act' for details.

<sup>(</sup>d) For different accounting periods.

general, rural and principal residence land. The principal residence scale provided for minimum tax of \$10 and maximum tax of \$150 on properties valued in excess of \$50 000. The scale in respect to rural land provided for minimum tax of \$25 and maximum tax of \$150 on properties with land values equal to or exceeding \$100 000. The general scale of land tax, in respect of which minimum tax of \$10 applied, was virtually identical to the schedule of rates which applied in the previous year.

Eleven municipalities were revalued with effect from 1 July 1982. These were the municipalities of Bothwell, Campbell Town, Devonport, Evandale, George Town, Hamilton, Kingborough, Ross, Scottsdale, Sorell and Wynyard. Total land value increased by \$274 998 962 as a consequence of the quinquennial revaluations. Increases in valuations for the remaining municipalities amounted to \$6 261 350 resulting in an overall increase for the State of \$281 260 312.

Total land tax assessed for 1982-83 increased by \$1 982 570 or 28.5 per cent to \$8 936 784. Of the total land tax assessed \$7 392 800 related to general land, \$860 928 to principal residence land and \$683 009 to rural land.

The following table details the number of taxpayers and tax payable, by value range for each of the land tax categories:

Value	Principal	residence	Rural		General	
\$	Number	Tax \$	Number	Tax \$	Number	<i>Tax</i> \$
1— 5 000	3 139	31 390	475	11 875	24 608	246 080
5 001— 10 000 10 001— 15 000	33 953 16 028	339 530 229 271	1 170 1 309	29 250 32 725	20 751 7 236	207 510 206 433
15 001— 25 000 25 001— 50 000	5 760 1 155	166 378 84 309	2 265 3 160	56 625 114 060	4 849 2 705	392 247 600 201
50 001— 75 000	53	7 950	1 342	97 794	866	451 740
75 001—100 000 100 001—125 000	11	1 650 450	757 391	94 230 58 650	376 195	328 416 248 123
125 001—150 000 150 001—200 000	_		309 324	46 350 48 600	134 143	235 447 363 986
200 001—250 000			178	26 700	71	266 008
250 001 and above		**********	441 —	66 150	219 26	3 789 125 57 534
Total	60 102	860 928	12 121	683 009	62 179	7 392 850

Land Tax Assessed 1982-83 (Source: Commissioner of Taxes, Report 1982-83)

### State Deceased Persons' Estate Duties

The legislation dealing with State deceased persons' estate duties is contained in the *Deceased Persons' Estates Duties Act* 1931 (as amended).

Following the announcement in the 1982 Budget that the Government had decided to abolish all death duties, the *Deceased Persons' Estates Duties Amendment* Act (No. 49 of 1982) provided that duty would not be payable in respect to the estates of persons dying on or after 1 October 1982.

As a consequence of the lag in lodgment and assessment of affidavits, there was no noticeable impact on monthly assessments until some months after October. However, by the end of the year, there had been a significant decline in the number of estates being lodged each month and the amount of duty assessed.

The following table gives details of assessments for 1982-83:

	State Decease	l Persons'	Estate D	uties	
Number of Esta	ites. Net Value	and Tax	Assessed.	Tasmania.	1982-83

Grade of dutiable	Estates		Net value as	Total duty assessed	Average duty per
value	Examined	Taxable	assessed	(a)	taxable estate
	no.	no.	\$'000	\$'000	\$
1— 500	19		2	_	
501— 1 000	4		3		and the same of th
1 001— 1 500	1	_	1		
1 501— 2 000	4	1	7		
2 001— 3 000	5	_	13		_
3 001— 4 000	7	_	24	_	_
4 001— 5 000	13	6	61	1	169
5 001 6 000	6	_	33		_
6 001— 8 000	12	6	129	1	180
8 001— 10 000	24	5	216	1	175
10 001— 15 000	55	19	664	11	564
15 001— 20 000	69	22	940	29	1 298
20 001— 30 000	144	54	3 525	107	1 985
30 001— 40 000	112	42	3 877	144	3 432
40 001— 50 000	77	33	3 494	174	5 279
50 001—100 000	136	43	9 286	522	12 128
100 001—150 000	35	22	3 658	244	11 088
150 001—200 000	28	22	3 503	419	19 041
200 001 and over	47	28	10 393	618	22 073
Adjustments				-82	••
Total	798	303	39 829	2 188	••

<sup>(</sup>a) Rates of duty and levels of exemption vary according to the class of beneficiary and the type of asset contained in the estate (details may be obtained from the Public Trustee).

# Motor Taxation

The chief components of motor taxation are: motor tax assessed on a power-weight formula; vehicle registration fees; drivers' and riders' licences; and other registration fees mainly related to public vehicles.

Details of motor taxation collections are shown in the following table:

State Motor Taxation, Tasmania (\$'000)

Particulars	1980-81	1981-82	1982-83
Motor tax	17 729	18 746	17 021
Public vehicle fees (a)	760	285	240
Stamp duty on—Third party insurance	465	561	547
Vehicle registration	5 370	7 820	9 349
Other traffic fees (b)	5 109	6 336	5 677
Total	29 433	33 748	32 834
Paid into Consolidated Revenue Fund	29 313	33 613	32 704
Retained by Transport Tasmania	120	135	130

<sup>(</sup>a) Includes public vehicle fees retained by Transport Tasmania.

<sup>(</sup>b) Includes registration fees, licences, number plate charges, transfer fees and learners' permits.

<sup>&#</sup>x27;Motor tax' plus most of the item 'public vehicle fees' shown in the above table are paid to the State Highways Trust Fund.

### Fees and Licences under the Licensing Act

The State raises revenue from hotels, clubs, restaurants and liquor wholesalers by licensing and imposing 'percentage fees' based on turnover for the year *preceding* collection.

Fees and Related Licences Collected Under the Licensing Act, Tasmania (\$'000)

Fees	1980-81	1981-82	1982-83
Percentage fees (a)— General, club, on-licences Off-licences Other fees	4 394 896 35	4 801 921 37	5 096 932 39
Total	5 325	5 759	6 067

<sup>(</sup>a) Based on liquor purchases by hotels and direct sales by wholesalers to the public.

### Gambling Taxation

The following table shows gambling turnover for recent years:

Turnover from the Major Forms of Legal Gambling, Tasmania (Source: Tasmanian Racing and Gaming Commission) (\$ million)

Particulars	1979-80	1980-81	1981-82	1982-83	1983-84
Racing—					
TAB	46.7	55.7	61.8	62.1	69.6
On-course tote	2.5	4.2	5.4	6.1	6.7
Bookmakers	49.0	55.0	48.9	r 41.9	41.5
Total racing turnover	98.2	114.9	116.1	r 110.1	117.8
Casino	56.0	59.0	68.0	89.3	100.5
Tattersalls & Tattslotto	22.2	25.3	35.1	34.5	38.7
Soccerpools	1.3	1.1	0.9	2.0	2.2
Minor gambling (a)	16.8	18.1	17.1	14.7	20.7
Total gambling turnover	194.5	218.4	237.2	r 250.6	279.9

<sup>(</sup>a) Lucky envelopes, bingo, punch boards, and includes estimates only for raffles and calcuttas.

Racing Taxation: Amendments to the Racing and Gaming Act in 1974 established the Totalisator Agency Board from January 1975, operating both on and off-course totalisator betting, and restricted the operations of licensed bookmakers to on-course betting only. (For further details on the rates of taxation on racing, see the 1977 Year Book.)

State Taxation on Lotteries: From 1942 (when the Commonwealth Government became the sole collector of income tax), lotteries conducted from Hobart by Tattersalls (George Adams Estate) were Tasmania's chief source of revenue through State taxation. On 14 July 1954, the promoters transferred their operations to Victoria. A new organisation—Tasmanian Lotteries—was granted a licence and operated until 30 September 1961, when the proprietor surrendered the licence. No operator is now licensed.

In September 1960, the Racing and Gaming Act 1952 was amended to permit agreements with other States for the sale of their lottery tickets in Tasmania. Under an agreement with the Victorian Government, Tattersalls was allowed to sell tickets through accredited Tasmanian representatives; the Victorian Government was to pay quarterly, to the Tasmanian Government, 15½ per cent of the value of subscriptions made as a result of this concession. The duty payable was increased to 16¼ per cent from 1 January 1979.

Casino Tax and Licence Fees: The rate of casino tax and the licence fee were established by an agreement made in September 1968 between the State Treasurer, Federal Hotels Ltd and Australian National Hotels Ltd. The agreement was ratified by the Wrest Point Casino Licence and Development Act 1968. The casino tax is calculated according to a graduated scale based upon monthly gross profit and is payable monthly. Initially, rates ranged from five per cent of gross profit where that profit was less than \$25 000 for the month, to 30 per cent where the gross profit exceeded \$125 000. The licence fee was fixed at \$2 500 per month.

Early in 1975, the State Government received a submission from Australian National Hotels Ltd for changes in the tax scale. As a result, the effective maximum rate of tax was reduced to 25 per cent. This reduction was effected, from 1 June 1975 to 30 November 1976, by the remission of one sixth of the tax paid through an appropriation from Consolidated Revenue. An amendment to the Act passed in November 1976 reduced the actual maximum rate of tax to 25 per cent. In this chapter, taxation receipts have been recorded *net* of the remission of casino tax and, consequently, total receipts and expenditure for Consolidated Revenue are slightly less than the totals recorded by the State Treasurer.

Details of casino taxation collections are shown in the following table:

# Casino Tax and Licence Fees, Tasmania (\$'000)

Particulars	1980-81	1981-82	1982-83
Casino tax	2 948 30	3 069 37	3 201 117
Total	2 978	3 106	3 318

# LOCAL GOVERNMENT FINANCE

### Introduction

Local government finance statistics in Tasmania are compiled by the Australian Bureau of Statistics from annual local government accounts. Under Section 329 of the Local Government Act 1962 each local government authority has to submit its accounts annually to the Auditor-General. Copies of these accounts are also made available to the ABS.

During 1979-80, the ABS introduced a System of Standardised Local Government Finance Statistics (SLGFS) to enable the production of uniform statistics for all local government authorities in Australia. Owing to changes in definitions of items, due to the introduction of the SLGFS, the following financial statistics are not comparable with those in issues of the *Year Book* prior to 1981.

### **Ordinary Services**

### Revenue and Loan Receipt

The largest proportion of local government revenue comes from rates (44.7 per cent in 1982-83) which are direct charges on owners of property. After rates, the next most important sources of revenue are government and semi-government grants, and charges for public works and services. The following table shows the revenue and loan receipts of the Tasmanian municipalities and cities for 1982-83:

### Local Government Authorities, Tasmania Ordinary Services—Revenue and Loan Receipts, 1982-83 (\$'000)

Category	Amount	Per cent of total	
Revenue—			
Rates (including penalties)	48 556	44.7	
Licences, fees and fines	1 843	1.7	
Charges	10 899	10.0	
Interest received	6.512	6.0	
Transfers from trading activities	123	0.1	
Government grants—General purpose	13 654	12.6	
Specific: capital	8 369	7.7	
Specific: current	5 401	5.0	
Other revenue	7 285	6.7	
Total revenue	102 641	94.5	
Loan Receipts—			
From—Commonwealth and State Governments	125	0.1	
Other lenders	5 794	5.3	
Total loan receipts	5 919	5.5	
Total revenue and loan receipts	108 559	100.0	

# Outlay

The following table summarises the outlay of the Tasmanian municipalities and cities for 1982-83:

### Local Government Authorities, Tasmania Ordinary Services—Outlay (a), 1982-83 (\$'000)

Category	Amount
Outlay on goods, services and land—	
Capital—Land and fixed assets	30 990
Capital—Land and fixed assets Current	63 881
Total outlay on goods, services and land	94 871
Debt charges—Interest paid	8 228
Debt redemption	5 149
Levies paid to Governments	2 618
Donations paid	152
Debt charges—Interest paid  Debt redemption  Levies paid to Governments  Donations paid  Other (b)	1 704
Total outlay	112 722

<sup>(</sup>a) Comprises outlay from revenue and loans.

The following table shows the outlay on goods, services and land, classified by purpose category of expenditure and whether capital or current:

<sup>(</sup>b) Advances to public and transfers to trading activities.

### Local Government Authorities, Tasmania Ordinary Services Outlay on Goods, Services and Land by Purpose (a), 1982-83 (\$'000)

Category			
	Current	Capital	Total
General administration	16 319	806	17 126
Law, order and public safety	475	69	544
Education, health, welfare and housing	2 681	883	3 565
Protection of the environment	4 403	1 283	5 686
Community and regional development	560	9	569
Other community amenities	849	214	1 062
ublic halls and civic centres	1 566	2 545	4 111
Recreation and culture	10 203	4 005	14 208
Roads and bridges	18 327	16 642	34 969
street lighting	1 565	6	1 571
Plant purchases n.e.c.		42	42
Other outlay	6 932	4 487	11 419
Total outlay	63 881	30 990	94 871

(a) Comprises outlay from revenue and loans.

#### Rates

Under the Local Government Act 1962, rates may be based on assessed annual value (i.e. the gross annual income, at the time of valuation, that the person owning the land might obtain by letting the land and its fixtures to a tenant), unimproved value (i.e. value of land only), the capital value (i.e. value of land plus improvements), or upon a composite value incorporating the unimproved value plus some arbitrary proportion of the value of improvements.

In Tasmania, it has been usual for rates to be based on annual values despite isolated and unsuccessful campaigns in favour of taxing on unimproved value only. In estimating annual value, the valuer is taking into account not only the land but also the improvements (e.g. buildings) so there is, in fact, a close relationship between movements in the total capital value of any property and movements in its assessed annual value. The Land Valuation Act 1971 consolidated and amended the law relating to land valuation.

### System of Valuation

The valuation of property is carried out by a State Government authority, the Land Valuation Branch. Its valuations form the basis of two distinct taxes: land tax collected by the State; and rates collected by local government authorities on the basis of assessed annual values.

Until 1975-76, land tax was based on the unimproved value of land. The Land Valuation Act 1971 set up the mechanism by which the basis could be changed to 'land value', being the capital value of the land in its present state but excluding the value of buildings and other artificially established improvements. For a complete definition of 'land value', reference should be made to the Act.

Since it is impossible to completely revalue all properties within the State in the course of a single year, revaluation is carried out on a rotational basis, e.g. St Leonards, New Norfolk and Lilydale were valued in 1976 and again in 1981.

Tasmania is the only State which uses the assessed annual value system of rating properties in all local government areas. In New South Wales and Queensland, site value rating is used almost exclusively and the majority of all local government authorities in Australia make use of the site value of property in determining at least part of their rates. Under site value rating, rates are based on the site (unimproved land) value of properties only, whereas under the assessed annual value system of rating, rates are based on a notional earning capacity of properties.

The table that follows shows the value of property in Tasmania for recent years:

<b>Total Property</b>	Valuation of	All Local	Government	Areas,	Tasmania	at 1.	July
•			lillion)				

Year	Total capital value	Assessed annual value	Land value	Year	Total capital value	Assessed annual value	Land value
1977	3 531.99	218.86	1 155.61	1980	6 448.32	397.69	2 092.20
1978	4 241.72	260.11	1 401.17	1981	7 055.27	435.46	2 308.99
1979	5 678.18	344.62	1 865.19	1982	7 701.97	480.36	2 597.54

### Rate Collections

The following table shows details of the rates collected in Tasmania for the latest four-year period available:

Rates Received by Local Government Authorities, Tasmania (\$'000)

Rate	1979-80	1980-81	1981-82	1982-83
Ordinary services	37 319	38 619	43 682	48 556
Business undertakings— Water Sewerage	13 566 11 230	15 190 12 403	19 061 13 778	21 649 16 071
Total	24 796	27 593	32 839	37 721
Grand total Percentage increase (a)	62 114 10.8	66 213 6.6	76 520 15.6	86 277 12.8

<sup>(</sup>a) Over previous year.

## Grants to Local Government

### Background

In recent years, major developments have occurred in relation to the finances of local government in Australia. The combination of rate structures reaching 'saturation' levels and rising costs of operation, together with increased responsibilities for facilities in areas such as recreation, health, roads, water and sewerage, etc., has led local government throughout Australia to press for general revenue grants from governments to supplement revenue raised from rates. This demand has arisen despite the increasing assistance given in the form of specific purpose grants from both State and Commonwealth Governments.

In 1973 the Commonwealth Parliament passed the Grants Commission Act 1973 repealing the Commonwealth Grants Commission Act 1933. The 1973 Act laid down procedures for local government authorities to apply for financial assistance from the Commonwealth and for such applications to be the subject of inquiry and report by the Grants Commission. It also provided that the grants to the States for local authorities should be provided in such a way as to promote financial equality between local authorities and regional groupings of such authorities.

These arrangements were replaced in 1976 by the tax sharing arrangements described below, and the Grants Commission ceased to be responsible for recommending amounts to be paid to specific local authorities (Commonwealth Grants Commission Act 1976).

### Local Government Assistance Under The Tax Sharing Arrangements

The arrangements agreed to in 1976 between the Commonwealth and the States for the sharing of personal income tax collections with local government, and subsequently incorporated in the *Local Government (Personal Income Tax Sharing) Act* 1976, are broadly as follows:

• each year, local government in the States will be entitled to a fixed percentage of net personal income tax collections in the previous year;

- the amount so derived will be divided among the States in specified proportions which are subject to recommendation by the Commonwealth Grants Commission;
- each State will allocate a minimum of 30 per cent of the assistance among local authorities on a basis which takes into account the respective populations of those local authorities, but which may also take into account the respective sizes and the respective population densities, and any other matters agreed upon between the Commonwealth and the State concerned;
- the remaining assistance will be allocated among the local authorities, having regard to their respective financial needs, on the recommendation of State Grants Commissions.

In 1979-80 the Act was amended on two occasions. The effect of these amendments was to increase the share of net personal income tax collections allocated to local government in the States from 1.52 per cent to 1.75 per cent of the previous year's collections in 1979-80, and to 2 per cent in 1980-81 at which it has remained.

## Conditions of Operation

For 1982-83, the Commonwealth Government allocated \$424.5m to the States for distribution to local governments. The distribution of this amount between the States was made on a percentage basis recommended by the Commonwealth Grants Commission. The following State percentages and amounts were derived under the formula determined by that Commission:

### Commonwealth Grants to Local Government, 1982-83

State	Percentage of total	Amount of grant (\$'000)
New South Wales	36.4977	154 928
Victoria	25.4513	108 037
Queensland	16.8606	71 571
Western Australia	9.3897	39 858
South Australia	8.6010	36 510
Tasmania	3.1997	13 582
Total	100.0000	424 486

For 1982-83, 30 per cent (\$4.1 million) of the Tasmanian allocation (\$13.6 million) was distributed on a per head of population basis. The balance (\$9.5 million) was distributed by the State Grants Commission as equalisation grants.

# Principles for Determining Equalisation Grants

The functions of the State Grants Commission are largely covered by Section 9 of the Act, which sets down certain broad principles to be followed. The fundamental guideline for the determination of grants is set out in Section 9 (2) (d) of the Act. It requires the Commission to ensure that, as far as possible, the grant recommended for a municipality will be an amount which, providing it makes a reasonable rating effort, will enable it to provide services at about the same standard as other municipalities of a similar type. This is viewed as the principle of relative financial need. In determining the grants necessary to equalise the fiscal capacity of municipalities, the Commission has adopted the principle that a grant must basically reflect differences between the revenue-raising capacity of municipalities and the relative cost of providing services (expenditure differentials).

The Commission has adopted methods to identify and measure those factors which affect relative rateable capacity and the cost of functioning at a given standard. To the extent to which a municipality is below the standard or faced with higher costs, a *prima facie* case exists for an equalisation component.

For 1976-77, the Commission decided that an equal allocation should be made between revenue and expenditure components but, in so doing, included the 'per capita' element (30 per cent) of the funds in the revenue component. The Commission, in 1977-78, re-examined this basis of allocation and came to the conclusion that, overall, it tended to unduly favour larger municipalities. It has now decided that allocation to revenue and expenditure components should be equal within the amount available for equalisation grants. From 1980-81 onwards, the weighting for revenue and expenditure inequalities has been on a 50-50 basis. The next table shows the allocation of Commonwealth grants to revenue and expenditure components and the per capita grants portion for four years:

Commonwealth Financial Assistance Grants to Local Government, Tasmania (\$'000)

Allocation	1979-80	1980-81	1981-82	1982-83
Equalisation grants—				
Revenue disabilities	2 235	3 368	3 929	4 754
Expenditure disabilities	2 731	3 368	3 929	4 754
Total	4 966	6 737	7 859	9 508
Per capita grant	2 128	2 887	3 368	4 075
Total grant	7 095	9 624	11 227	13 582

The Commonwealth Grants Commission's only role under the new scheme is to advise of the appropriate percentage distribution of Commonwealth personal income tax between the States, and, in the initial period, to provide advice to the State bodies on methods for calculating grants to municipalities.

### Financial Assistance by Grants Commission

The following table provides details of financial assistance to Tasmanian municipalities from distributions under the revised scheme for 1981-82 and 1982-83:

Commonwealth Government Financial Assistance to Local Government in Tasmania (a)

William Co.		198.	1-82		1982-83			
Local government area	Per capita grant	Equal- isation grant	Total grant	Per head of popu- lation (b)	Per capita grant	Equal- isation grant	Total grant	Per head of popu- lation (b)
	\$'000	\$'000	\$'000	\$	\$'000	\$'000	\$'000	\$
Beaconsfield	111	223	334	23.61	135	269	404	28.15
Bothwell	6	63	69	93.76	7	78	85	118.14
Brighton	66	152	218	22.62	92	188	280	26.55
Bruny	3	38	41	103.98	4	46	50	127.49
Burnie	158	315	473	23.28	194	376	570	27.82
Campbell Town	12	59	71	46.95	15	71	86	55.88
Circular Head	62	238	300	37.83	76	291	367	46.35
Clarence	360	648	1 008	22.08	435	780	1 215	26.53
Deloraine	39	133	172	33.94	48	163	211	42.02
Devonport	183	365	548	23.09	227	437	664	27.42
Esperance	25	115	140	43.95	30	141	171	54.42
Evandale	14	59	73	37.01	19	72	91	45.45
Fingal	23	123	146	49.51	28	150	178	61.01
Flinders	8	90	98	88.27	11	110	121	109.63
George Town	59	128	187	25.59	70	153	223	30.46
Glamorgan	12	68	79	48.90	15	82	97	64.91
Glenorchy	338	496	834	19.90	400	595	995	23.88
Gormanston	2	29	31	238.42	1	30	31	284.00
Green Ponds	7	44	51	51.18	10	54	64	62.30
Hamilton	23	123	146	57.54	24	150	174	69.10
Hobart	391	392	783	16.44	454	465	919	19.27

continued next page

Commonwealth Government Financial Assistance to Local Government in Tasmania (a)-continued

		198	1-82		1982-83			
Local government area	Per capita grant	Equal- isation grant	Total grant	Per head of popu- lation (b)	Per capita grant	Equal- isation grant	Total grant	Per head of popu- lation (b)
	\$'000	\$'000	\$,000	\$	\$'000	\$'000	\$'000	\$
Huon	39	143	182	37.38	47	175	222	45.78
Kentish	32	140	172	39.85	41	172	213	48.55
King Island	22	118	140	51.49	26	145	171	62.82
Kingborough	133	239	372	21.16	168	291	459	25.55
Latrobe	47	117	164	29.32	53	141	194	34.35
Launceston	258	355	613	19.29	303	424	727	22.88
Lilydale	73	193	266	29.46	86	232	318	35.00
Longford	45	104	149	25.62	56	128	184	31.39
New Norfolk	82	180	262	26.89	93	220	313	32.08
Oatlands	18	105	123	58.35	20	128	148	72.21
Penguin	42	113	155	29.15	51	139	190	35.85
Port Cygnet	17	90	107	46.41	22	109	131	56.93
Portland	15	70	85	39.35	21	88	109	49.32
Queenstown	33	165	198	52.19	36	197	233	63.04
Richmond	14	82	96	51.31	18	100	118	63.36
Ringarooma	18	111	129	55.72	22	136	158	67.25
Ross	4	47	51	93.57	5	59	64	123.55
St Leonards	160	321	481	23.09	199	385	584	27.91
Scottsdale	33	129	162	37.60	41	159	200	45.40
Sorell	39	153	192	35.51	52	183	235	41.99
Spring Bay	15	82	97	48.62	19	101	120	62.17
Strahan	3	42	45	105.46	4	53	57	129.78
Tasman	ž	65	72	67.05	10	81	91	83.00
Ulverstone	104	216	320	24.46	125	263	388	29.25
Waratah	18	89	107	49.74	21	109	130	59.41
Westbury	49	110	159	23.49	64	134	198	29.09
Wynyard	98	231	329	27.33	115	280	395	32.37
Zeehan	49	148	197	29.36	64	175	239	35.55
Tasmania	3 368	7 859	11 227	26.27	4 075	9 508	13 582	31.60

<sup>(</sup>a) Excludes grants for specific purposes. Comprises grants to municipalities on a population basis and equalisation grants, as determined by the State Grants Commission.

# **Trading Activities**

The classification 'trading activities' is used in Australian local government finance statistics to include municipal tram and bus services, municipal electricity supply (generation or distribution), municipal water and sewerage schemes, municipal abattoirs, etc. In Tasmanian local government finance statistics, electricity supply ceased to appear as from 1948-49 (the Hydro-Electric Commission is now the sole supplier). Municipal tram and bus services ceased to appear as an item in 1955-56, when the Metropolitan Transport Trust acquired the city transport services operating in Hobart, Launceston and Burnie. Consequently, the only activities under the heading of municipal 'business undertakings' in current Tasmanian statistics relate to water supply, sewerage and abattoirs.

The next table shows both current and capital transactions for the trading activities of all local government authorities:

<sup>(</sup>b) Figures are based on the populations of the municipalities at the beginning of each year.

Local Government Authorities,	Tasmania:	<b>Trading</b>	Activities,	1981-82
	(\$'000)			

Particulars	Water	Sewerage	Abattoirs	Total
Current transactions—				
Current income—				
Rates	19 061	13 778		32 839
Grants	7 032	642	_	7 674
Other (a)	2 000	1 184	419	3 603
Total	28 092	15 604	419	44 115
Current outlay—				
Working expenses (b)	10 431	6 315	306	17 052
Interest paid	1 759	5 962	_	7 721
Other (c)	12 778	53	34	12 864
Total	24 968	12 330	340	37 637
Surplus or deficit (—)	3 125	3 274	80	6 478
Capital transactions— Source of funds—				
Loans	1 980	5 749	40	7 769
Grants	1 759	97		1 856
	621	260	19	901
Reimbursements			11	4 241
Other (d)	954	3 276	11	4 241
Total	5 315	9 383	70	14 767
Use of funds—				
Land and fixed assets	4 210	7 546	59	11 815
Debt redemption	1 104	1 834	10	2 949
Other (e)		3		3
Total	5 315	9 383	70	14 767

<sup>(</sup>a) Comprises sales and charges, interest received, and transfers from ordinary services.

# Loan Receipts

At 30 June 1982, the aggregate loan debt of all local government authorities was \$171 755 100 of which only \$10 762 100 (6.3 per cent) was owed to the Commonwealth and State governments. The main Tasmanian sources of loans for local government authorities are banks, superannuation and various trust funds, and insurance companies. The cities of Hobart and Launceston also raise loans by public issues.

The next table shows the loan account receipts of all local government authorities:

<sup>(</sup>b) Includes wages and salaries, purchase of goods and services, pay-roll tax and depreciation.

<sup>(</sup>c) Levies paid to government and semi-government authorites and transfers to ordinary services.

<sup>(</sup>d) Depreciation allowances, contributions and donations received, advances repaid by public, sales of land and other fixed assets, surplus on current account, reduction in bank balances, etc. A negative amount can arise when, for example, there has been an increase in bank balances (e.g. as a result of loan moneys raised but not yet spent).

<sup>(</sup>e) Increase in stocks and advances to public.

Local Government	Authorities,	Tasmania:	Loan	Raisings
	(\$'000	)) ·		U

Particulars	1977-78	1978-79	1979-80	1980-81	1981-82
Loan raisings for—				· · · · · · · · · · · · · · · · · · ·	
Sewerage	5 395	4 897	4 352	6 801	5 749
Water supply	769	1 796	1 383	1 765	1 980
Ordinary services	12 350	13 179	9 342	7 822	(a) 6 086
Total raisings	18 514	19 872	15 077	16 388	13 815

(a) Includes abattoir loan raisings of \$40 000.

The amount that any local government authority can raise is governed by:

• the difficulty in finding willing lenders;

• the fact that the approval of the State Treasury is required; and

• the ability of an authority to repay its debt. The Local Government Act 1962 restricts the total indebtedness of an authority to 10 times its average annual income for the preceding three financial years.

The following table shows, in summary form, loan raisings and loan debt:

Local Government Authorities, Tasmania: Loan Raisings and Loan Debt (\$'000)

	Loan	L	oan debt at 30 June	?
Year	raisings during financial year	To State and Commonwealth Government	To other creditors	Total
978-79	19 872	9 563	140 370	149 934
979-80	15 077	12 105	145 195	157 300
980-81	16 388	11 958	153 874	165 832
981-82	13 815	10 762	160 993	171 755
1982-83	11 250	10 963	163 680	174 644

### Source of Loan Funds

It can be seen from the preceding table that the local government loan debt includes only a small liability in respect of advances made by the State Treasury. This scheme was phased out at the end of 1976-77.

# Instalment Debentures

Much of the debt of the municipalities is in the form of instalment debentures which involve equal periodic payments (usually half-yearly); such payments are allocated to redemption and interest in changing proportions as the loan approaches maturity.

#### **Further References**

### ABS Publications:

Local Government Finance, Tasmania (5501.6), annual.

Australian Municipal Information System (AMIS) Manual (1103.0), irregular, latest issue released in December 1980—this Manual describes the AMIS computer data base system which contains a range of data on a comparable basis for all Australian local government areas. Output from the system is available on request.

Commonwealth Government Finance, Australia (5502.0), annual. State and Local Government Finance, Australia (5504.0), annual.

Taxation Revenue, Australia (5506.0), annual.

#### Other Publications

Report of the Auditor-General and the Statement of Public Accounts (published annually by the Tasmanian Government Printer, Hobart).

Tasmanian Racing and Gaming Commission, Annual Report, Tasmanian Government Printer, Hobart.

# CHAPTER 5

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# Chapter 5

# **DEMOGRAPHY**

### **POPULATION**

### Introduction

### Population Censuses

Censuses of the population were conducted by the State in 1841, 1847, 1851, 1857, 1861, 1870, 1881, 1891 and 1901; the Australian Statistician became responsible for censuses with the establishment of the Commonwealth Bureau of Census and Statistics (now the Australian Bureau of Statistics) and conducted censuses in 1911, 1921, 1933, 1947, 1954, 1961, 1966, 1971, 1976 and 1981. The next census will be held on 30 June 1986.

# Census Post-Enumeration Surveys

Post-enumeration surveys, designed to measure the degree of error, were conducted after the 1971, 1976 and 1981 censuses. Net under-enumeration (under-count) was derived by comparing results from the Census and post-enumeration survey for the same individuals and identifying omissions and duplications in the Census. Under-enumeration rates for Tasmania and Australia are given below:

#### Census Under-enumeration Rates

Area	1971	1976	1981
Tasmania	0.36	1.12	0.97
	1.35	2.71	1.86

### Estimated Resident Population

From 30 June 1981 the ABS adopted the 'usual residence' concept as the basis of population estimation. Estimates on this basis are referred to as estimated resident population. Estimated resident population figures have been calculated from 1971 onwards for the State. Resident population for local government areas have been calculated from 1976 onwards.

The estimated resident population for Tasmania in census years is derived from population census counts as follows:

• Census count (actual location) plus Tasmanian residents absent interstate less interstate visitors to Tasmania less overseas visitors equals census count, place of usual residence, Tasmania.

• Census count, place of usual residence was then adjusted for underenumeration (determined by the post-enumeration survey) and Tasmanian visitors temporarily overseas added in to give the *estimated* resident population for the State.

Intercensal estimates are prepared by applying vital and migration statistics to census based data. Natural increase (excess of births and deaths) and net migration (excess of arrivals over departures) are applied to the census based estimated resident population to produce an ongoing series. After each census the estimates for the newly completed intercensal period are revised to adjust for the difference between the new census based result and the comparable estimate.

### Comparison With Other States

The following table compares the Tasmanian population at censuses from 1901 with that of other States and territories (full-blood Aboriginals are included from 1966):

Australia: Census Populations of States and Territories ('000 Persons)

State or territory	1901	1933	1947	1954	1966	1971 (a)	1976 (a)	1981 (a)
NSW	1 355	2 601	2 985	3 424	4 238	4 726	4 960	5 235
Victoria	1 201	1 820	2 055	2 452	3 220	3 601	3 810	3 947
Queensland	498	947	1 106	1 318	1 674	1 852	2 092	2 345
WA	184	439	502	640	848	1 054	1 178	1 319
SA	359	581	646	797	1 095	1 200	1 274	1 300
Tasmania	172	228	257	309	371	398	412	427
NT	5	5	11	17	57	86	98	123
ACT (b)		9	17	30	96	151	208	228
Australia	3 774	6 630	7 579	8 987	11 599	13 067	14 033	14 923

<sup>(</sup>a) Estimated resident population. Census figures up to 1966 are as recorded.

The average annual (compound) increase in population for Tasmania from 1976 to 1981 (based on adjusted population) was 0.73 per cent. The corresponding Australian annual rate of population increase was 1.27 per cent.

# **Estimated Resident Population**

# Population in Local Government Areas

The next table shows estimated resident population in local government areas, statistical divisions, sub-divisions and districts for the years 1976-84.

Population in Local Government Areas at 30 June

Local government area Statistical Subdivision						Annual average rate of increase		
Statistical Div Statistical Dis		1976	1981	1983	1984р	1976 to 1981 (per cent)	1981 to 1984 (per cent)	
Hobart	(H)	50 190	47 890	r 47 630	47 650	- 0.93	-0.17	
Glenorchy	(H)	43 450	41 860	r 41 550	41 550	-0.74	-0.25	
Clarence	(H)	43 120	45 550	r 46 050	46 660	1.10	0.81	
Brighton	(H) (S)	5 040	9 640	r 11 090	11 440	13.85	5.87	
Kingborough	(H) (S)	14 280	17 510	r 18 440	19 200	4.16	3.12	
New Norfolk	(H) (S)	10 210	9 800	9 730	9 750	-0.82	-0.17	
Sorell	(H) (S)	4 490	5 420	5 740	5 870	3.84	2.69	
Bothwell	(S)	800	730	710	720	-1.81	-0.46	
Bruny	(S)	330	390	390	380	3.40	-0.86	
Esperance	(S)	3 240	3 170	3 140	3 140	-0.44	-0.32	
Glamorgan	(S)	1 330	1 490	1 520	1 540	2.30	1.11	
Green Ponds	(S)	850	1 000	1 040	1 050	3.30	1.64	
Hamilton	(S)	3 490	2 570	2 500	2 480	-5.94	-1.18	
Huon	(S)	4 960	4 860	4 840	4 870	~ 0.41	-0.07	
Oatlands	(S)	2.270	2 070	2 020	2 000	-1.83	-1.14	
Port Cygnet	(S)	2 140	2 290	2 340	2 370	1.36	1.15	
Richmond	(S)	1 710	1 830	1 900	1 940	1.37	1.96	
Spring Bay	(S)	1 840	1 910	1 940	1 950	0.75	0.69	
Tasman	(S)	970	1 080	1 120	1 150	2.17	2.12	
HOBART ST SOUTHERN	AT DIV	164 400	171 110	r 173 830	175 660	0.80	0.88	
STAT DIV	ISION	30 310	29 950	29 860	30 050	0.24	-0.11	

<sup>(</sup>b) Part of NSW prior to 1911.

### **POPULATION**

Population in Local Government Areas at 30 June continued Local government area Annual average rate Statistical Subdivision of increase 1976 to Statistical Division 1976 1981 1983 1984p 1981 to Statistical District 1981 1984 (per cent) (per cent) Launceston ..... 33 640 31 980 r 31 630 31 600 1.01 0.40 Beaconsfield ..... r 14 540 14 870 1.77 1.67 12.960 14 150 4 960 5 020 5.060 5 100 0.24 0.53 Deloraine ..... 1 960 3.88 2.81 2.060 2 130 Evandale ..... 1.620 7 310 7 290 7.310 1.58 George Town ..... 6.760 1.31 Lilydale ..... 8.970 9.070 9.180 9.430 0.22 Longford ..... 5.540 5 810 5 9 1 0 6.010 0.96 1.13 18 940 20.710 21.330 1.80 0.99 St Leonards ..... r 21 130 Westbury 7 2 1 0 3.34 2.63 5 660 6 6 7 0 6.960 99 050 102 680 r 103 760 104 990 0.72 0.74 Tamar Stat Subdivision 0.43 Campbell Town ..... 1 630 1.540 1.530 1 520 1.13 Fingal ..... 2 980 2 920 2 890 2 890 0.41 0.34 0.91 Flinders ..... 1 010 1 090 1.110 1 120 1.54 Portland ..... 1 640 2 130 2 300 2 390 5.37 3.91 2 340 0.26 0.14Ringarooma ..... 2 300 2 3 3 0 2 360 500 1.79 1.92 Ross ..... 580 530 500 4 540 1.49 1.44 4 040 4 460 Scottsdale ..... 4 350 North Eastern Stat 0.91 Subdivision 14 180 14 890 15 150 15 300 0.98 NORTHERN STAT DIVISION 113 230 117 570 r 118 910 120 290 0.76 0.77 Burnie ..... 20 100 20 400 r 20 600 20 810 0.30 0.67 7 930 0.05 0.29 Circular Head ..... 7 9 1 0 7 9 3 0 7 980 22 210 23 930 r 24 450 24 840 1.50 1.25 Devonport ..... 4 510 0.99 Kentish ..... 4 140 4 350 4 420 1.21 King Island ..... 2 760 2 720 2 680 2 640 0.29 1.00 5t630 Latrobe ..... 5.540 5.700 5 800 0.32 1.00 Penguin ..... 5 140 5 270 5 3 3 0 5 3 7 0 0.50 0.63 Ulverstone ..... 12 330 13 110 r 13 410 13 660 1.23 1.38 0.79 1.09 Wynyard ..... 11 650 12 120 r 12 300 12 520 North Western Stat 0.78 0.93 Subdivision 91 800 95 440 r 96 820 98 130 Gormanston ..... 390 110 19.73 - 5.42 110 130 -4.39 1.06 Queenstown ..... 4 680 3 740 3 680 3 860 470 0.89 2.22 Strahan ..... 460 440 450 0.31 1.26 Waratah ..... 2 0 2 0 2 150 2 200 2 170 Zeehan ..... 5 010 6 670 6 740 6 560 5.89 -0.55Western Stat Subdivision 12.560 13 130 13 180 13 170 0.89 0.10 MERSEY-LYELL STAT DIVISION 104 360 108 570 110 000 111 300 0.79 0.83 TASMANIA 412 300 427 200 432 600 437 300 0.710.78 Launceston 0.64 0.79 Statistical District ..... 84 090 86 810 87 740 88 890 Burnie-Devonport

75 150

1.02

(a)

(a)

72 890

74 070

Statistical District (a) .......

<sup>(</sup>a) Area not delineated prior to the census of 30 June 1981.

## **Population Distribution**

Compared to other parts of the world, Tasmania, like the other Australian States, is sparsely populated. Its density of only six persons per square kilometre compares for example with that of England of 356 (June 1982). Although its population of 432 600 is the lowest of all the Australian States, only Victoria and New South Wales have populations more dense than Tasmania. Nevertheless Tasmania, as shown in the table below, has the most decentralised population of all the States.

Population Distribution, All States, 30 June 1983

State	<i>Po</i>	Proportion of total	
Sime	Total	Capital city statistical division	in capital city statistical division
	.000	'000	%
NSW	5360.4	3332.6	62.17
Victoria	4037.6	2864.6	70.95
Queensland	2471.6	1138.4	46.06
WA	1364.5	969.1	71.02
SA	1341.5	969.2	72.25
Tasmania	432.6	173.7	40.15

# Age Distribution of the Population

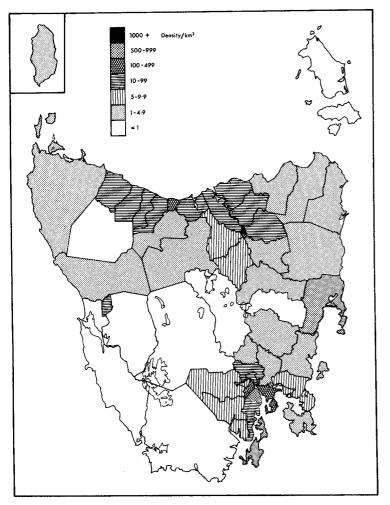
The following table shows the age distribution of the estimated resident population at 30 June 1976, 1981 and 1983:

Age Distribution of the Estimated Resident Population

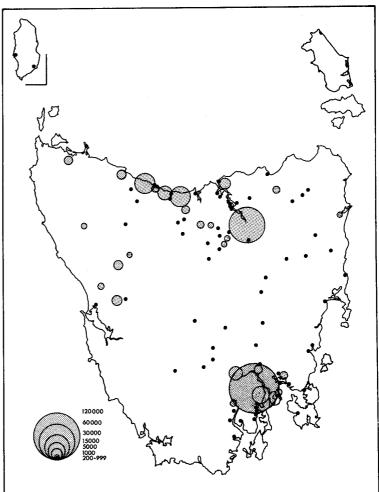
	30 Jui	ne 1976	30 Jui	ne 1981	30 June 1983				
Age (years)	Persons	Pro- portion (per cent)	Persons	Pro- portion (per cent)	Males	Females	Persons	Pro- portion (per cent)	
0- 4 5- 9	36 920 39 610	9.0 9.6	33 990	8.0	17 580	16 920	34 490	8.0	
10-14	40 310	9.6	37 110 39 540	8.7 9.3	17 700 20 340	16 870 19 650	34 580 39 990	8.0 9.2	
15-19	39 460	9.6	39 060	9.1	18 870	18 510	37 370	8.6	
20-24	34 060	8.3	37 350	8.7	18 880	19 110	38 000	8.8	
25-29	33 320	8.1	34 460	8.1	17 670	17 430	35 090	8.1	
30-34	26 840	6.5	33 380	7.8	16 970	16 430	33 410	7.7	
35-39	23 630	5.7	26 750	6.3	15 430	14 980	30 410	7.0	
40-44	20 780	5.0	23 030	5.4	12 210	11 720	23 940	5.5	
45-49	21 960	5.3	20 090	4.7	10 410	10 140	20 540	4.7	
50-54	22 450	5.4	21 250	5.0	10 530	10 070	20 590	4.8	
55-59	19 280	4.7	20 850	4.9	10 340	10 220	20 560	4.8	
60-64	17 460	4.2	17 990	4.2	8 960	9 840	18 800	4.3	
65-69	13 870	3.4	15 880	3.7	7 630	8 550	16 180	3.7	
70+	22 350	5.4	26 570	6.2	11 480	17 190	28 670	6.6	
Total	412 300	100.0	427 300	100.0	214 990	217 620	432 620	100.0	
18 years and over	270 560	65.6	293 550	68.7	148 280	153 290	301 560	69.7	
Pensionable age (a)	45 119	10.9	51 880	12.1	19 110	35 580	54 690	12.6	

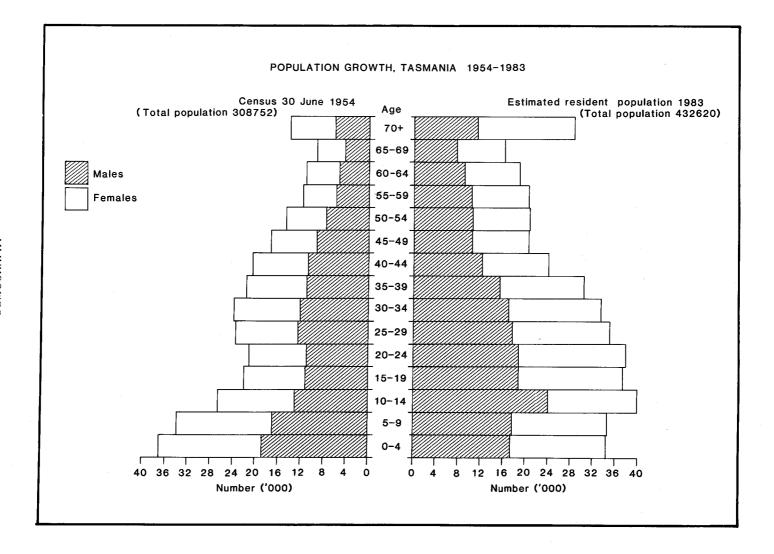
<sup>(</sup>a) Males 65 years and over. Females 60 years and over.

# Population Density: Tasmanian Municipalities



# Populations of Urban Centres





## Populations Centred on Hobart, Launceston and Burnie-Devonport

Populations centred on Hobart, Launceston and Burnie-Devonport are compiled and published on a two boundary basis. For Hobart the two boundary concept was introduced in 1966, Launceston in 1976 and Burnie-Devonport in 1981. The boundaries are:

- A fixed outer boundary to enclose expected urban growth over the next 20 to 30
  - (a) The Hobart Statistical Division comprises the cities of Hobart and Glenorchy, Clarence municipality and parts of Kingborough, New Norfolk, Brighton and Sorell municipalities;
  - (b) The Launceston Statistical District comprises the City of Launceston and parts of seven neighbouring municipalities;
  - (c) The Burnie-Devonport Statistical District comprises the City of Devonport and parts of other municipalities along the North-West Coast.

Maps of these areas are contained in Appendix A.

- A moving inner boundary which moves out towards the fixed outer boundary as urban growth occurs;
  - (a) Urban Hobart comprises the continuous urban portions of the cities of Hobart and Glenorchy and of the municipalities of Clarence and Kingborough. It stretches from Granton in the north to Taroona in the south on the western shore and on the eastern shore from Risdon Vale southward to Rokeby:
  - (b) Urban Launceston is the area of continuous urban development centred on Launceston City and includes parts of the municipalities of Beaconsfield, Westbury, Evandale, St Leonards and Lilydale;
  - (c) Urban Burnie is the continuous area of development around the town centre and includes Somerset in the Wynyard municipality. Urban Devonport is the area of continuous development around the urban centre.

Estimated resident populations of the fixed outer boundary areas are given in an earlier table.

# 1981 CENSUS RESULTS

The following table contains information from the 1981 Census. The figures are 'as counted' i.e. no adjustments for under-enumeration nor place of usual residence have been made. Tables showing religious denomination, marital status, birthplace, industry sector and industry group were published in the 1983 Year Book while tables showing the labour force, occupation and family structure were published in the 1984 Year Book. More detailed census statistics about the population can be obtained from the ABS on request.

## Population in Urban Centres and Bounded Localities

The next table shows the 'as counted' population and dwellings of urban centres and bounded localities in Tasmania at 30 June 1981:

Persons and Total Dwellings in Urban Centres and Bounded Localities at 30 June 1981

Locality	Males	Females	Persons	Occupied dwellings	Unoccupiea dwellings
Beaconsfield	426	472	898	296	39
Beauty Point	507	491	998	344	90
Bicheno	336	338	674	214	131
Bothwell	187	169	356	131	26
Bracknell	173	174	347	111	2
Branxholm	141	132	273	91	6
Bridgewater-Gagebrook	3 339	3 541	6 880	1 780	79
Bridport	427	458	885	344	242
Burnie-Somerset	10 029	10 339	20 368	6 584	465
Campbell Town	415	464	879	300	24
Carrick	145	146	291	91	8
Cremorne	143	132	275	104	76

continued next page

Persons and Total Dwellings in Urban Centres and Bounded Localities at 30 June 1981—continued

Persons and Total Dwellings in Urb	an Centres ar	ia Dounded Le	cannes at 3	<u>—continuea</u>	
Locality	Males	Females	Persons	Occupied dwellings	Unoccupied dwellings
Cressy	319	321	640	207	8
Currie	443	416	859	288	29
Cygnet	350	365	715	237	20
Deloraine	904	1 019	1 923	691	54
Devonport	10 267	11 157	21 424	7 040	483
Dilston	122	101	223	73	8
Dodges Ferry	357	386	743	260	501
Dover	297	273	570	189	60
Dunalley Electrona	105 110	98 117	203	79	56
Evandale	314	300	227 614	61 203	5 7
Exeter	171	182	353	105	8
Fingal	231	193	424	144	16
Forth	132	141	273	84	3
Franklin	227	252	479	138	4
Geeveston	434	426	860	262	24
George Town	2 828	2 764	5 592	1 584	112
Grassy	467	313	780	189	13
Gravelly Beach	265	270	535	189	13
Hadspen	450	458	908	267	14
Hagley	117	115	232	61	2
Heybridge	191	204	395	146	8
Hobart	62 834	65 769	128 603	43 881	2 600
Huonville-Ranelagh	686	661	1 347	463	30
Kempton	120	106	226	73	4
Kettering	136	152	288	88	11
Kingston-Blackmans Bay Lanena-Blackwall	4 194	4 362	8 556	2 764	155
Latrobe	208 1 180	231 1 221	439 2 401	174 721	18 40
Lauderdale	1 057	1 060	2 117	672	40 66
Launceston	31 210	33 345	64 555	21 734	1 387
Legana	477	487	964	302	15
Lilydale	158	150	308	108	5
Longford	988	1 039	2 027	689	46
Low Head	171	168	339	111	104
Luina	324	198	522	125	19
Margate	242	234	476	151	3
Maydena	239	222	461	128	24
Mole Creek	163	140	303	101	18
New Norfolk	3 129	3 1 1 4	6 243	1 682	116
Nubeena	121	104	225	81	24
Oatlands	271	274	545	199	23
Orford	195	183	378	160	212
Penguin	1 270	1 346	2 616	826	60
Perth	616	613	1 229	418	24
Pontville Port Sorell	460 415	448 444	908	282	16
Queenstown	1 925	1 789	859 3 714	318 1 169	231 125
Railton	444	413	857	275	21
Richmond	299	288	587	207	17
Ridgley	223	229	452	127	4
Ringarooma	111	112	223	83	4
Rosebery	1 485	1 190	2 675	648	51
Ross	141	148	289	104	22
Rossarden	207	158	365	106	69
St Helens	495	510	1 005	354	80
St Marys	318	335	653	221	26
Savage River	632	509	1 141	292	33
Scottsdale	998	1 004	2 002	652	34
Seven Mile Beach	352	330	682	230	17
Sheffield	462	483	945	281	21

Persons and Total	Dwellings in Ur	an Centres an	Bounded	Localities at	30 June	1981—continued
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Locality	Males	Females	Persons	Occupied dwellings	Unoccupied dwellings
C 24.	1.602	1 606	3 378	1 060	52
Smithton	1 692	1 686	684	213	15
Snug	352	332			
Sorell-Midway Point	1 288	1 256	2 544	829	52
Stanley	311	292	603	206	30
Strahan	196	206	402	136	16
Sulphur Creek	175	192	367	117	9
Swansea	205	223	428	156	47
Tarraleah	287	211	498	125	10
Triabunna	475	449	924	272	20
Tullah	1 369	525	1 894	296	17
Turners Beach	415	427	842	264	23
Ulverstone	4 456	4 957	9 413	3 154	247
Waratah	185	157	342	119	24
Westbury	561	600	1 161	410	28
Woodbridge	147	112	259	78	6
Wynyard	2 269	2 313	4 582	1 432	108
Zeehan	959	791	1 750	482	28

### VITAL STATISTICS

In previous issues of the Year Book, births and deaths tables have been based on the State of registration, or where the event was registered as having taken place. The tables which follow for births and deaths (with the exception of infant mortality tables) are based on the State of usual residence principle where events are considered to be Tasmanian if it involves persons usually resident in Tasmania, even though the birth or death may occur in another State or Territory of Australia.

Summary of Vital Statistics, Tasmania

Year		mber		Rate per 1 000 of mean population			Infant mortality	
	Marriages	Live births	Deaths	Infant deaths (a)	Marriages propor- tion	Live births propor- tion	Deaths propor- tion	(deaths under one year per 1 000 live births)
1979 1980 1981 1982 1983	3 433 3 515 3 576	6 789 6 776 7 230 7 039 7 062	3 200 3 422 3 364 3 444 3 319	99 87 89 59 80	7.73 8.10 8.23 8.32 p 8.42	16.14 16.00 16.93 16.38 p 16.32	7.60 8.08 7.88 8.01 p 7.67	14.6 12.8 12.3 8.4 11.3

<sup>(</sup>a) Deaths under one year; included also in total deaths.

# Crude Rate Comparisons

The rates per 1 000 of mean population for births, deaths and marriages are referred to as *crude* rates. It will be seen in regard to marriages, that not *all* the population is 'at risk'; children and those already married being obvious excluded examples. Similarly, births are clearly events related to certain fertile age groups of women and not to the total population. Births also are related to the number of married persons and to the age structure of the married proportion of the community. Finally, deaths have a definite relationship with the numbers of each sex and the age structure of the community. Therefore, crude rates are valid measures of comparison in the short term only.

Subject to this limitation, the following Tasmanian historical comparisons exist as from 1880:

- crude marriage rate: highest 10.51 (1946); lowest 5.50 (1895 and 1896);
- crude birth rate: highest 36.63 (1884); lowest 15.90 (1980);
- crude death rate: highest 17.41 (1883); lowest 7.53 (1979).

It is probably significant that 1946 was the year of rapid demobilisation after World War II and that a similar marriage trend was recorded for 1919 and 1920 after World War I. The crude birth rate for 1980 (15.90 per 1 000 of mean population) is the lowest recorded. The popularly accepted theory attributes the current low figure to deliberate family planning.

# Review of Infant Mortality

Infant mortality relates to the number of deaths of children aged under one year and the rate is expressed as the number of such deaths per 1 000 live births. It follows that comparisons over long periods of time are valid and not affected by the limitations attached to crude rates. The peak year since 1880 was 1883 with a rate of 124.0. In the period 1880-1910, the annual infant mortality rate exceeded 100 on 14 occasions. There has been a steady improvement in infant mortality rates over the past 50 years. The rate for the period 1916-1920 was 64, for the year 1961, 16.8, and in 1982 there was a record minimum of 8.4.

At the turn of the century, 20 to 25 per cent of all deaths were those of infants under one year. The rapid fall in infant mortality rates since then has had a marked effect on the crude death rate. Infant mortality has fallen largely due to advances in medical science enabling the control of disease and the development of techniques to reduce perinatal deaths; improvements in child care and nutrition also have made a significant contribution. A perinatal death is defined as: the death of a viable fetus (product of conception of at least 20 weeks gestation or of weight not less than 400 grams) at any time up to the complete expulsion or extraction from its mother; and the death of a child born alive, where the death occurs at any time before the twenty-ninth day after the date of birth of the child. Details relating to perinatal deaths are included in the annual bulletin *Deaths*, *Tasmania* (3304.6).

### **Marriages**

The following table analyses the ages of all bridegrooms and brides contracting marriages registered in 1983:

Bridegrooms and Brides by Age, Tasmania, 1983

Age last birthday (years)	Bride	grooms	Brides		
Tigo tuos on mady (years)	Number	Per cent of total	Number	Per cent of total	
Jnder 20	111	3.05	522	14.32	
)-24	1 483	40.70	1 742	47.80	
5-29	997	27.36	656	18.00	
)-34	430	11.80	289	7.93	
-39	219	6.01	169	4.64	
-44	129	3.54	86	2.36	
-49	72	1.98	57	1.56	
-54	65	1.78	38	1.04	
-59	60	1.65	32	0.88	
-64	32	0.88	21	0.58	
and over	46	1.26	32	0.88	
Total	3 644	100.00	3 644	100.00	

The next table gives the average age of brides and bridegrooms in recent years based on 'age last birthday' figures:

Average Age of Bridegrooms and Brides (Years), Tasmania

Particulars	1978	1979	1980	1981	1982	1983
Average age of bridegrooms—						
Bachelors	24.0	24.3	24.2	24.4	24.8	25.0
Widowers	56.7	57.2	57.1	59.0	57.4	55.9
Divorcees	37.6	37.3	37.0	36.1	37.2	37.6
All bridegrooms	27.4	27.7	27.5	27.8	28.1	28.5
Average age of brides—						
Spinsters	21.4	21.4	21.7	21.9	22.4	22.5
Widows	51.0	50.1	51.0	50.4	49.7	49.5
Divorcees	33.4	34.7	33.8	32.7	34.0	33.7
All brides	24.7	24.8	24.8	25.0	25.5	25.7

The following three tables show: the number of persons under 21 years of age marrying; the conjugal condition of persons marrying; and marriages according to the type of marriage ceremony conducted, for a six-year period.

Marriages: Persons Under 21 Years of Age, Tasmania

Year		Age in		Persons under 21 years		
reur <u> </u>	Under 18	18	19	20	Number	Percentage of all marriages
		Bri	idegrooms			
1978	3 3 6 1 4	66 62 57 49 33 33	151 128 133 101 100 74	285 267 248 228 240 168	505 460 444 379 373 279	16.04 14.14 12.93 10.78 10.43 7.66
			Brides			
1978 1979 1980 1981 1982 1983	149 145 123 95 77 71	317 308 272 238 198 156	433 421 399 362 351 295	406 387 455 457 398 407	1 305 1 261 1 249 1 152 1 024 929	41.45 38.75 36.38 32.77 28.64 25.49

Conjugal Condition of Persons Marrying, Tasmania

	Bridegrooms				_ Total		
Year	Bachelors	Widowers	Divorcees	Spinsters	Widows	Divorcees	marriages s
1978	2 508	107	533	2 467	125	556	3 148
1979	2 555	109	590	2 567	128	559	3 254
1980		92	654	2 719	119	595	3 433
1981	2 699	103	713	2 729	134	652	3 5 1 5
1982		100	702	2 784	114	678	3 576
1983		107	753	2 773	125	746	3 644

Marriages, Religious an	d Civil. Tasmania
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Particulars of celebration	1978	1979	1980	1981	1982	1983
Religious rites—						
Anglican	959	945	929	962	997	887
Catholic	515	500	508	554	497	545
Uniting Church	428	371	464	388	346	335
Presbyterian (a)	34	38	16	51	31	39
Christian Brethren	30	45	37	49	38	61
Baptist	77	87	99	72	79	84
Churches of Christ	22	19	17	32	28	26
Salvation Army	33	21	26	34	37	29
Seventh Day Adventist	12	10	11	14	8	16
Other	79	119	120	94	88	103
Civil ceremonies (b)	959	1 099	1 206	1 265	1 427	1 519
Total	3 148	3 254	3 433	3 515	3 576	3 644

<sup>(</sup>a) From 1978 figures relate to 'Continuing Presbyterians' only, following the amalgamation of the Presbyterian, Methodist and Congregational Churches. (b) Marriages contracted before Registrars and Marriage Celebrants.

#### Divorce

The Matrimonial Causes Act 1860, as amended, provided for divorce in Tasmania until 1 February 1961, when Australia came under a uniform divorce law, the Matrimonial Causes Act 1959, passed by the Commonwealth Parliament. The Family Law Act 1975 came into effect on 5 January 1976, replacing the Matrimonial Causes Act 1959. The main changes were the creation of the Family Court of Australia and the alteration of the grounds for divorce to the sole ground of irretrievable breakdown of marriage after 12 months separation.

Every decree of dissolution of marriage is now, in the first instance, a decree *nisi* and is normally made absolute after a period of one month. Previously the period was three months. The following tables show details of divorces granted:

### Petitions Filed and Divorces Granted, Tasmania

Particulars	1978	1979	1980	1981	1982	1983
Total petitions filed	1 097	1 141	1 276	1 240	1 368	1 277
Dissolutions granted on petition of— Husband	427 705	426 741	512 773	423 716	542 849	497 862
Total dissolutions	1 132	1 167	1 285	1 139	1 391	1 359

Divorces: Ages of Parties at Time of Marriage, Tasmania, 1983

Age of husband (years)	Age of wife (years)								
	Under 20	20-29	30-39	40-49	50-59	60 and over	Not stated	husbands	
Under 20	136	21	_		_	_	2	159	
20-29	408	549	19	1			3	980	
30-39	12	82	47	12		_	1	154	
40-49	1	8	18	12	4	_		43	
50-59	_	1	2	3	2	1	_	. 9	
60 and over	_		1	4	1	1		7	
Not stated	1	4	1	_	_	_	1	7	
Total wives	558	665	88	32	7	2	7	1 359	

Divorces: Ages of Parties at Time of Divorce, Tasmania, 1983

Age of husband (years)	Age of wife (years)							
	Under 20	20-29	30-39	40-49	50-59	60 and over	Not stated	husbands
Under 20		1		_		_	_	1
20-29	4	301	16			_	2	323
30-39		173	341	18		_	3	535
40-49	_	10	141	165	10	1	_	327
50-59	_	_	7	49	53	9	_	118
60 and over	_		1	6	22	18	1	48
Not stated	_	4	2		_	_ ·	1	7
Total wives	4	489	508	238	85	28	7	1 359

### Divorces: Duration of Marriage and Issue, Tasmania, 1983

Duration of		Number of children						
Duration of marriage (years)	No children	l child	2 children	3 children	4 children	5 or more children	Total divorces	number of children (a)
0- 4	156	97	37	8	1	3	302	217
5- 9	129	83	119	29	8	1	369	447
10-14	34	36	117	49	14	3	253	488
15-19	12	24	66	51	24	5	182	434
20-24	31	42	30	12	4	1	120	159
25-29		21	7	1	_		71	38
30 and over		13	1		_	_	60	15
Not stated							2	
Total	452	316	377	150	51	13	1 359	1 798

<sup>(</sup>a) Under 18 years of age.

### Births

In previous issues of the Year Book, birth tables have been based on the State of registration, or where the birth was registered as having taken place. The tables which follow for births are based on the State of usual residence principle where a birth is considered to be Tasmanian if it involves persons usually resident in Tasmania, even though the birth may have occurred in another State or Territory of Australia.

The following table shows the number of births classified according to the age of mother for recent years:

Number of Births Classified According to Age of Mother, Tasmania

Age group	1978 1979 1980 198					1983	
(years)		1981	1982	Number	Per cent		
10-14	6	2	3	6	7	3	_
15-19	864	828	774	742	685	584	8.3
20-24	2 427	2 373	2 301	2 562	2 363	2 325	32.9
25-29	2 347	2 341	2 351	2 487	2 533	2 643	37.4
30-34	922	1 001	1 051	1 138	1 163	1 181	16.7
35-39	233	194	250	253	253	288	4.1
40-44	31	47	44	42	34	37	0.5
45 and over	6	3	2		1	1	_
Total births	6 836	6 789	6 776	7 230	7 039	7 062	100.0

One observation of interest is that births of males, in total, usually exceed those of females. The next table shows births by sex and indicates masculinity:

Births by Sex and Masculinity, Tasmania

Particulars	1978	1979	1980	1981	1982	1983
Births of—						
Males	3 463	3 438	3 495	3 674	3 616	3 651
Females	3 373	3 351	3 281	3 556	3 423	3 411
Total	6 836	6 789	6 776	7 230	7 039	7 062
Masculinity (a)	102.7	102.6	106.6	103.3	105.6	107.04

<sup>(</sup>a) Number of male births per 100 female births.

In the following table, births are analysed by sex and by age of the mother and classified as nuptial or ex-nuptial:

Births by Sex, Age of Mother and Nuptial State, Tasmania, 1983

Aga graun	Nuptial births		Ex-nuptial births		All births			
Age group (years)	Male	Female	Male	Female	Male	Female	Total	
10-19	110	116	189	172	299	288	587	
20-24	1 005	892	214	214	1 219	1 106	2 325	
25-29	1 249	1 200	87	107	1 336	1 307	2 643	
30-34	577	524	50	30	627	554	1 181	
35-39	123	120	27	18	150	138	288	
40 and over	18	14	2	4	20	18	38	
Total	3 082	2 866	569	545	3 651	3 411	7 062	

### Birth Rates

The crude birth rate is expressed as the number of births per 1 000 of mean population; this is obviously an unsatisfactory measure since births are events strictly related to the number of women in the fertile age groups. A more satisfactory index is the fertility rate, expressed as the number of births per 1 000 women aged 15-44 years. However, there are profound differences between the relative fertility of various age groups, and a further refinement is the calculation of age-specific birth rates. The following table shows age-specific birth rates for each five-year age group of females from 10-49 years, the fertility rate applicable to all women in the age group 15-44 years, and the crude birth rate:

Birth and Fertility Rates, Tasmania

Particulars	1978	1979	1980	1981	1982	1983p
		Age Specific B	irth Rates (a)			
Age group (years)—				-		
under 20	43.7	41.7	39.3	38.5	36.8	31.7
20-24	140.9	134.2	125.6	137.5	124.9	121.6
25-29	144.7	143.2	140.4	145.9	146.4	151.6
30-34	61.8	65.2	65.7	69.2	71.7	71.9
35-39	19.7	15.8	19.6	19.2	17.8	19.2
40-44	2.9	4.4	4.0	3.7	2.9	3.2
45-49	0.6	0.3	0.2	<del></del>	0.1	0.1
		Fertility	Rate (b)			
Fertility rate	75	74	72	75	73	72
		Crude Birti	h Rate (c)			
Crude birth rate	16.4	16.1	16.0	16.9	16.4	16.3

<sup>(</sup>a) Number of births per 1 000 women in age groups shown.

<sup>(</sup>b) Number of births per 1 000 women aged 15-44 years.

<sup>(</sup>c) Number of births per 1 000 of mean population.

# Total Fertility and Gross and Net Reproduction Rates

Total fertility for a population is obtained either by summing single age-specific birth rates for a year and dividing by 1 000 or by summing five-year age-specific birth rates, multiplying by five and dividing by 1 000. The result represents the hypothetical number of children a woman would bear throughout her child bearing years if she experienced the age-specific birth rates for that particular year during her lifetime.

The gross reproduction rate is derived from total fertility and the ratio of female to total births. It indicates the number of female children who would be born on average to women, supposing the rates from which it was calculated were to apply throughout the reproductive period. It is an indication of the extent to which the population is reproducing itself except that it does not allow for females who failed to survive to the end of their childbearing period. The net reproduction rate allows for such mortality. It is obtained by multiplying the age-specific rates by the survivor proportions in the corresponding age group of the stationary or life table population. Mortality in childhood and young adulthood is now so low that there is little difference between current gross and net reproduction rates.

A net reproduction rate of one indicates that the reproduction pattern for the particular year is such as to replace the current generation of mothers by an equivalent number of daughters, if continued.

The next table gives total fertility rates and gross and net reproduction rates for Tasmania for recent years. If the net reproduction rate of a country falls below unity, the population will ultimately decrease and die out (assuming there is no net immigration gain) unless fertility is raised and/or mortality lowered. The fact that the population may be currently increasing is irrelevant.

Total retuity, and Gross and Net Ro	Total Fertility, and Gross and Net Reproduction Rates, Tasmania									
Year	Total fertility	Gross reproduction rate	Net reproduction rate							
1978	2 072	1.023	1.000							
1979	2 024	1.000	0.979							
1980	1 974	0.955	0.937							
1981	2 070	1.018	0.995							
1982	2 003	0.974	0.958							
1983	1 997	0.964	0.950							

Total Fertility, and Gross and Net Reproduction Rates, Tasmania

### Infant Mortality

Infant mortality relates to children dying within one year of birth. The table that follows analyses such deaths in further detail and shows that the greatest mortality rate is associated with infants in their first day of life. To obtain a correct picture of relative risk, it should be noted that deaths in the 'one day and under one week' class are spread over six days; in the 'one week and under four weeks' class spread over 21 days; and in the final class, spread over 338 days.

Infant Mortality:	Number of	Deaths an	d Mortality	Rates at	Specific	Ages.	Tasmania

	Infant deaths		Mortality rate (a) at age specified					
Year	Number	Per 1 000 live births	Under 1 day	l day and under l week	l week and under 4 weeks	4 weeks and under 12 months		
1978	97	14.3	4.7	3.1	0.6	5.9		
1979	95	14.1	3.7	3.0	1.8	5.6		
1980	79	11.7	3.9	1.7	1.2	4.9		
1981	86	12.0	5.1	1.1	1.0	4.7		
1982	55	7.9	2.4	0.9	0.4	4.1		
1983	74	10.5	3.1	1.3	1.4	4.7		

<sup>(</sup>a) Infant deaths per 1 000 live births.

# Causes of Infant Deaths

The following table has been compiled on the basis of the Ninth Revision (1975) of the International Classification of Diseases (World Health Organisation):

Infant Mortality: Causes of Death Under One Year, Tasmania, 1982

			A	lge		
	Cause	Under one day	One day to under one week	One week to under one month	One month to under one year	Total
001-139	Infectious and parasitic diseases.		_	1		1
140-239	Neoplasms		_	1	1	2
460-519 740-759	Diseases of the respiratory system Congenital anomalies	- Magazini	_		2	2
765	Perinatal causes (760-779)	7	2	4	8	21
765	Disorders relating to short ges- tation and unspecified low birthweight	3		_	. 1	4
767	Birth trauma	_	2	_		2
768	Intrauterine hypoxia and birth	2	2	1	_	
769	asphyxia	3	2	1		6
770	Respiratory distress syndrome	3	1			4
770	Other respiratory conditions	2		_	1	3
775	Fetal and neonatal haemorrhage Endocrine and metabolic dis-	1	1	_		2
	turbances	1	_	-	_	1
776 777	Haematological disorders Perinatal disorders of the diges-	_	1	1	_	2
	tive system	_	_	2		2
798.0 E800-	Sudden infant death syndrome		_		21	21
E999	Accidents, poisonings and violence	_	_	_	1	1
	Total	20	9	10	35	74

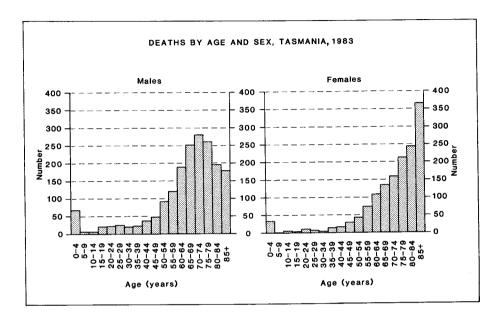
### Deaths

In previous issues of the Year Book, deaths tables have been based on the State of registration, or where the death was registered as having taken place. The tables which follow for deaths are based on the State of usual residence principle where a death is considered to be Tasmanian if it involves persons usually resident in Tasmania, even though the death may have occurred in another State or Territory of Australia.

A marked difference exists between male and female crude death rates as shown in the following table:

Male and Female Deaths and Crude Rates, Tasmania

Year	Number of deaths			Deaths	Ratio of male to female		
	Males	Females	Persons	Males proportion	Females proportion	Persons proportion	crude death rates
1978	1 848	1 468	3 316	8.85	7.03	7.94	1.259
1979	1 810	1 390	3 200	8.61	6.60	7.61	1.305
1980	1 951	1 471	3 422	9.24	6.92	8.08	1.335
1981	1 937	1 427	3 364	9.12	6.65	7.88	1.371
1982	1 896	1 548	3 444	8.88	7.16	8.01	1.240
1983	1 846	1 473	3 319	p 8.59	p 6.77	p 7.67	p 1.269



Death Rates for Specific Age Groups

Death Rates for Specific Age Groups (a), Tasmania

		Males			Females			Persons	
Age group (years)	1946-48	1970-72	1980-82	1946-48	1970-72	1980-82	1946-48	1970-72	1980-82
0-4	9.13	4.41	3.00	7.24	2.89	2.16	8.21	3.67	2.59
5-9	1.15	0.46	0.35	0.69	0.35	0.18	0.92	0.41	0.27
10-14	0.67	0.56	0.35	0.39	0.29	0.16	0.53	0.43	0.25
15-19	1.62	2.39	1.55	1.46	0.59	0.50	1.54	1.50	1.02
20-24	2.10	2.01	1.78	1.79	0.51	0.47	1.94	1.27	1.13
25-29	2.12	1.83	1.36	1.74	0.81	0.41	1.93	1.33	0.89
30-34	2.27	1.80	1.43	1.90	0.78	0.51	2.09	1.30	0.98
35-39	3.10	2.08	1.82	2.59	1.31	1.08	2.85	1.70	1.46
40-44	3.93	3.39	3.15	3.51	1.86	1.60	3.73	2.65	2.39
45-49	5.88	5.30	4.58	4.66	3.04	3.34	5.28	4.19	3.97
50-54	9.52	9.55	8.92	7.84	5.67	4.26	8.65	7.61	6.66
55-59	16.98	15.52	13.95	10.03	8.02	6.80	13.44	11.80	10.35
60-64	23.87	25.18	21.44	17.30	12.35	10.63	20.53	18.63	15.77
65-69	41.82	39.59	34.53	27.35	21.40	17.70	34.56	30.22	25.68
70-74	58.43	62.17	58.72	49.47	36.50	27.09	53.80	47.55	41.18
75-79		92.09	85.75	77.00	60.85	48.69	89.78	72.86	63.99
80-84	156.64	136.74	129.56	123.49	97.22	80.44	138.41	111.66	97.39
85 and									
over	292.36	218.20	212.89	220.32	200.29	160.12	250.16	206.17	174.30

(a) Rate per 1 000 of the population in the specified age group at census date.

Previously in this chapter, crude death rates were described as unsuitable for comparisons over long periods of time due to changes in the age structure of the community. In the above table, this difficulty is overcome by calculating death rates for specific age groups. The method employed is to obtain the average annual deaths for specific age

groups over those three-year periods which are broken into equal parts by a census of population (e.g. 30 June 1947 is the census date for a calculation of rates in the three years, 1946-1948 inclusive). Rates can then be calculated by comparing the average number of deaths for each group with the number of persons in each group, as revealed by the census. In theory, the calculation of such rates need not be restricted to periods for which a census date forms the midpoint but the advantage of accepting such restriction lies in the accuracy of the age distribution obtained from the census. In the table above, three-year periods have been selected, appropriate to the censuses of 1947, 1971 and 1981.

#### Causes of Death

The next table shows causes of death, the rates per 100 000 of mean population and the proportion of deaths by cause based on the Ninth Revision (1975) of the International Classification of Diseases (adopted for use in 1979). The classification employs the mortality of 50 causes recommended in the Ninth Revision (1975) of the International Classification of Diseases.

Causes of Death: Number and Rates, Tasmania, 1983

Cause of death	Number of deaths	Rate per 100 000 of mean population	Percentage of total deaths
All Causes (001-799, E800-E999)	3 319	767	100.0
Infectious and parasitic diseases (001-139)	12	3	0.4
Intestinal infectious diseases (001-009)	_	-	_
Tuberculosis (010-018)	3	1	0.1
Whooping cough (033)		_	
Meningococcal infection (036)			_
Tetanus (037)		_	-
Septicaemia (038)	2	-	0.1
Smallpox (050)		_	
Measles (055)	1	_	
Malaria (084)	_		-
All other infectious and parasitic diseases (020-032, 034, 035, 039-049, 051-054, 056-083,			
085-139)	6	1	0.2
Malignant neoplasms (140-208)	758	175	22.8
Malignant neoplasm of stomach (151)	48	11	1.4
Malignant neoplasm of colon (153)	86	20	2.6
Malignant neoplasm of rectum, rectosigmoid	**	_	
junction and anus (154)	30	7	0.9
Malignant neoplasm of trachea, bronchus and			
lung (162)	158	37	4.8
Malignant neoplasm of female breast (174)	63	15	1.9
Malignant neoplasm of cervix uteri (180)	13	3	0.4
Leukaemia (204-208)	19	4	0.6
All other malignant neoplasms (140-150, 152,	241	70	10.0
155-161, 163-173, 175-179, 181-203)	341	79	10.3
Diabetes mellitus (250)	46	11	1.4
Nutritional marasmus (261)	-	_	_
Other protein-calorie malnutrition (262, 263)	_		0.1
Anaemias (280-285)	4	1	0.1
	2	170	0.1
Diseases of the circulatory system (390-459)  Acute rheumatic fever (390-392)	1 640	379	49.4
	13	3	
Chronic rheumatic heart disease (393-398)  Hypertensive disease (401-405)	18	3 4	0.4 0.5
Ischaemic heart disease (410-414)	952	220	0.5 28.7
Acute myocardial infarction (410)	615	142	18.5
Other ischaemic heart disease (411-414)	337	78	10.2
Cerebrovascular disease (430-438)	328	76	9.9
Atherosclerosis (440)	60	14	1.8
All other diseases of the circulatory system	00	17	1.0
(415-429, 441-459)	269	62	8.1

Causes of Death: Number and Rates, Tasmania, 1983-continued

Cause of death	Number of deaths	Rate per 100 000 of mean population	Percentage of total deaths
<b>D</b>			
Pneumonia (480-486)	36	8	1.1
Influenza (487)	3	1,	0.1
Bronchitis, emphysema and asthma (490-493)	61	14	1.8
Ulcer of stomach and duodenum (531-533)	19	4	0.6
Appendicitis (540-543)	1	_	_
Chronic liver disease and cirrhosis (571)	25	6.	0.8
(580-589)	26	6	0.8
Hyperplasia of prostate (600)	1		
Abortion (630-639)	_		_
Direct obstetric deaths (640-646, 651-676)		_	_
Congenital anomalies (740-759)	38	9	1.1
Certain conditions originating in the perinatal			
period (760-779)	27	6	0.8
Birth trauma (767)	3	1	0.1
Hypoxia, birth asphyxia and other repiratory			
conditions (768-770)	13	3	0.4
Other conditions originating in the perinatal			
period (760-766, 771-779)	11	3	0.3
Signs, symptoms and ill-defined conditions (780-		•	0.0
799)	25	6	0.8
All other conditions (Remainder of 210-799)	359	83	10.8
Accidents and adverse affects (E800-E949)	157	36	4.7
Motor vehicle traffic accidents (E810-E819)	74	17	2.2
Accidental falls (E880-E888)	27	6	0.8
All other accidents (E800-E807, E820-E829,	2.	Ü	0.0
E890-E949)	56	13	1.7
Suicide (E950-É959)	69	16	2.1
Homicide (E960-E969)	9	2	0.3
All other external causes (E970-E999)	í		0.5

# Causes of Death in Age Groups

The previous tables showing causes of death make no reference to age, a complete dissection by age and cause being beyond the scope of a Year Book. Nevertheless, there is an extremely significant relationship between age and cause of death and the next table indicates, in summary form, their close inter-connection. For each of the specified causes in the next table, two percentages are shown: deaths in a particular age group as a proportion of total deaths from all causes in that age group; and deaths in a particular age group as a proportion of total deaths from the same causes at all ages. The causes chosen and specified are such that they account, in total, for approximately 75 per cent or more of deaths in most of the given age groups.

'Accidental and violent deaths' (800-999) account for 68.0 per cent of deaths in the age from 1 to 34 years inclusive. It is also worth noting the present relative unimportance of 'Infective and parasitic diseases' (001-139). The most important group, in a total sense, is 'Diseases of the heart' (391-398, 401-405, 410-429) followed by 'Cancer (all forms)' (140-208); then 'Cerebrovascular diseases' (430-438); and 'Diseases of the respiratory system' (460-519). Nevertheless, the inter-connection between age and cause of death is so close that none of these causes needs to be specified for some age groups in the table.

# Principal Causes of Death in Age Groups, Tasmania, 1983

(years) Under 1	Inter- national classifi- cation	Cause of death			
Under 1			Number	Proportion	of deaths
			Number	In age group (per cent)	At all ages (per cent)
	798	Sudden death (cause unknown)	21	26.3	0.6
	768-770	Anoxic and hypoxic conditions	13	16.3	0.4
	740-759 772	Fetal and neonatal haemorrhage	26	32.4	0.8
		Other causes	2 18	2.5 22.5	0.1 0.5
		All causes	80	100.0	2.4
1-4	800-999				
	740-759	Accidents and violence	12 2	57.1 9.5	0.3 0.1
		Other causes	7	33.4	0.1
		All causes	21	100.0	0.6
5-14	800-999	Accidents and violence	7	46.6	0.2
	140-208	Cancer (all forms) (a)	4	26.7	0.1
		Other causes	4	26.7	0.1
		All causes	15	100.0	0.4
	800-999	Accidents and violence	42	80.8	1.2
	140-208	Cancer (all forms) (a)	3	5.8	0.1
	740-759	Congenital anomalies Other causes	2 5	3.8 9.6	0.1 0.2
		All causes	52	100.0	1.6
25-34 8	800-999	Accidents and violence	39	66.1	1.2
	140-208	Cancer (all forms) (a)	8	13.6	0.2
	410-429	Diseases of heart	2	3.4	0.1
		Other causes	10	16.9	0.3
		All causes	59	100.0	1.8
	140-208 391-398 )	Cancer (all forms) (a)	20	25.0	0.6
4		Diseases of heart	7	8.8	0.2
	800-999	Accidents and violence	36	45.0	1.1
. 4	430-438	Cerebrovascular disease	5	6.2	0.2
	• •	Other causes	12	15.0	0.4
		All causes	80	100.0	2.5
	140-208 391-398 }	Cancer (all forms) (a)	62	35.0	1.9
4		-Diseases of heart	59	33.4	1.8
	800-999 ´	Accidents and violence	20	11.3	0.6
	460-519	Diseases of respiratory system	8	4.5	0.2
	430-438	Cerebrovascular diseases	8	4.5	0.2
3	530-579	Diseases of digestive system Other causes	7 13	4.0 7.3	0.2 0.4
		All causes	177	100.0	5.3

Principal Causes of Death in Age Groups, Tasmania, 1983-continued

			Deaths	from specific in age group	
Age group	Inter- national	Cause of death	nuse of death Proportion Number		of deaths
(years)	classifi- cation		Number	In age group (per cent)	At all ages (per cent)
55-64	391-398	1			
	401-405 410-429	Diseases of heart	159	33.4	4.8
	140-208	Cancer (all forms) (a)	174	36.5	5.2
	430-438	Cerebrovascular diseases	28	5.9	0.8
	460-519	Diseases of respiratory system	29	6.1	0.9
	800-999	Accidents and violence	23	4.8	0.7
	530-579	Diseases of digestive system	20	4.2	0.6
	440-448	Diseases of arteries	6	1.3	0.2
		Other causes	37	7.8	1.1
		All causes	476	100.0	14.3
65-74	391-398 401-405 410-429	Diseases of heart	312	40.4	9.4
	140-208	Cancer (all forms) (a)	212	27.4	6.4
	430-438	Cerebrovascular diseases	72	9.3	2.2
	460-519	Diseases of respiratory system	60	7.8	1.8
	440-448	Diseases of arteries	21	2.7	0.6
	530-579 320-389	Diseases of digestive system	21	2.7	0.6
	22000	gans	9	1.2	0.3
		Other causes	66	8.5	2.0
		All causes	773	100.0	23.3
75 and over .	391-398				
	401-405	Diseases of heart	629	39.7	19.0
	140-208	Cancer (all forms) (a)	273	17.2	8.2
	430-438	Cerebrovascular diseases	213	13.4	6.4
	460-519	Diseases of respiratory system	125	7.9	3.8
	440-448	Diseases of arteries	94	5.9	2.8
	530-579	Diseases of digestive system	52	3.3	1.6
	290-319	Mental disorders	46	2.9	1.4
	580-619 240-279	Diseases of the genitourinary system Endocrine, nutritional and metabolic dis-	33	2.1	1.0
	320-389	eases and immunity disorders	37	2.3	1.1
	520 507	organs	13	0.8	0.4
		Other causes	71	4.5	2.1
		All causes	1 586	100.0	47.8

<sup>(</sup>a) Includes Hodgkin's disease and the leukaemias.

#### Heart Diseases

As the previous two tables indicate, heart diseases (list items 391-398, 401-405, 410-429) are the greatest single cause of death. The next table summarises deaths from heart diseases for recent years:

Deaths from Heart Diseases (All Causes) (a), Tasmania

Year	Nı	ımber of dea	ths	Death rate per 100 000	Deaths as a percentage of deaths from all causes	
	Males	Females	Persons	of mean population proportion		
1980	697	457	1 154	272	33.7	
981	693	472	1 165	273	34.6	
982	663	542	1 205	280	35.0	
983	673	498	1 171	271	35.3	

(a) List items 391-398, 402, 404-405, 410-429.

# Malignant Neoplasms

In the next table, deaths from malignant neoplasms are shown according to site, for recent years and selected earlier years:

Deaths from Malignant Neoplasms, Tasmania

Deaths from Malignant	Neoplasm	s, Tasmania		· · · · · · · · · · · · · · · · · · ·	
Site of disease	Sex	1980	1981	1982	1983
Malignant neoplasm of:					
Lip, oral cavity and pharynx	M F	5 5	5 5	16 4	8 4
Digestive organs and peritoneum	M F	125 113	124 100	122 120	132 116
Respiratory and intrathoracic organs	M F	120 41	141 27	142 36	138 34
Skin —Melanoma	M F	6	5	9	12 11
—Other	M F	6 1	5 1	2 4	4
Breast Cervix uteri Body and unspecified parts of uterus Ovary and other uterine adnexa Prostate Bladder	F F F M M F	43 8 2 19 30 9 5	47 8 3 20 40 20 2	72 13 2 16 30 11	63 13 3 18 36 14 6
Other and unspecified genitourinaryorgans	M F	6	14 6	10 8	· 6
Brain	M F	9 9	7 9	13 5	16 10
Leukaemia	M F	13 11	15 12	11 19	12 7
Other neoplasms of lymphatic andhaematopoietic system	M F	16 13	15 21	26 12	13 16
All other and unspecified sites	M F	29 33	28 26	26 20	25 32
Total	M F	377 315	419 293	418 337	415 343
Death rate per 100 000 of mean population		163	167	176	175
Deaths as a percentage of deaths from all causes		20.2	21.2	22.0	22.8

# **EXPECTATION OF LIFE AND LIFE TABLES**

Previously, reference was made to the limitations of crude death rates as a measure of mortality. However, a correct measurement of the mortality of the population can be obtained from life tables.

A life table is, in effect, a mathematical model, its starting point being a hypothetical population (say 100 000) of newly-born males or females. Using data for a given period (e.g. single year age distribution of an actual population, deaths at single ages, etc.), the compiler calculates the theoretical number of survivors at each age in the hypothetical population until there are no survivors remaining. For the method of calculating life expectancy see previous issues of the *Tasmanian Year Book*.

The next table gives the number of survivors  $(1_x \text{ values})$  and complete expectation of life  $(e^{\circ}_x \text{ values})$  for Tasmanian males:

Tasmania: Life Tables, 1983 Survivors ( $\mathbf{1}_x$  and Complete Expectation of Life ( $\mathbf{e}^{\circ}_x$ )

_					Maics				
	Age x	$I_X$	e° <sub>X</sub>	Age x	$I_X$	$e^{\circ}_{X}$	Age x	$l_X$	$e^{\circ}_{X}$
0		100 000	71.68	35	95 703	39.26	70	64 964	10.90
1	***************************************	98 548	71.73	36	95 594	38.31	71	62 509	10.31
2		98 466	70.79	37	95 479	37.35	72	59 905	9.74
3		98 356	69.87	38	95 353	36.40	73	57 148	9.18
1		98 269	68.93	39	95 209	35.46	74	54 229	8.65
		00.153	60.01			24.52		51 147	0.14
5	***************************************	98 153	68.01	40	95 041	34.52	75	51 147	8.14
5	***************************************	98 038	67.09	41	94 848	33.59	76	47 911	7.66
7		98 009	66.11	42	94 627	32.67	77	44 555	7.19
8		98 009	65.11	43	94 379	31.75	78	41 116	6.75
9		98 009	64.11	44	94 106	30.84	79	37 645	6.33
10		98 009	63.11	45	93 808	29.94	80	34 195	5.92
11		97 994	62.12	46	93 488	29.04	81	30 780	5.52
12		97 971	61.13			28.14	82n	27 385	5.14
				47	93 146				
13		97 942	60.15	48	92 780	27.25	83	23 988	4.80
14		97 906	59.17	49	92 386	26.37	84	20 612	4.51
15		97 861	58.20	50	91 955	25.49	85	17 319	4.27
16		97 808	57.23	51	91 472	24.62	86	14 204	4.09
17		97 746	56.27	52	90 923	23.76	87	11 531	3.93
18		97 674	55.31	53	90 293	22.93	88	9 260	3.77
19		97 592	54.35	54	89 576	22.11	89	7 353	3.61
				•					-
20		97 500	53.40	55	88 770	21.30	90	5 768	3.47
21		97 399	52.46	56	87 882	20.51	91	4 467	3.33
22		97 291	51.52	57	86 918	19.73	92	3 405	3.22
23		97 178	50.58	58	85 880	18.97	93	2 556	3.12
24		97 061	49.64	59	84 758	18.21	94	1 893	3.04
25		96 941	40.70	<b>.</b>	02.520	17.47	95	1 205	2.97
			48.70	60	83 538	17.47	0.4	1 385	
26		96 818	47.76	61	82 199	16.75	96	1 003	2.91
27		96 693	46.82	62	80 729	16.04	97	720	2.85
28		96 566	45.88	63	79 126	15.36	98	513	2.80
29		96 435	44.94	64	77 397	14.69	99	363	2.75
30	۱,	96 304	44.00	65	75 557	14.03			
31		96 174	43.06	66	73 622	13.39			
32		96 047	42.12	67	71 601	12.75			
33		95 927	41.17		69 492	12.73			
33 34									
54		95 813	40.22	69	67 286	11.51			

The following table shows the  $l_x$  and  $e^{\circ}_x$  values for Tasmanian females:

Tasmania: Life Tables, 1983 Survivors ( $\mathbf{1}_x$  and Complete Expectation of Life ( $\mathbf{e}^{\circ}_x$ ) Females

	Age x	$I_X$	e° x	Age x	l <sub>x</sub>	e° <sub>X</sub>	Age x	1 <sub>X</sub>	e° X
0		100 000	78.92	35	98 100	45.22	70	80 641	14.55
1		99 205	78.55	36	98 034	44.25	71	79 092	13.83
2		99 120	77.62	37	97 953	43.28	72	77 390	13.12
3		99 061	76.66	38	97 859	42.32	73	75 515	12.43
4		99 030	75.69	39	97 755	41.37	74	73 457	11.77
5		99 001	74.71	40	97 644	40.42	75	71 212	11.12
6		98 971	73.73	41	97 531	39.46	76	68 796	10.50
7		98 971	72.73	42	97 417	38.51	77	66 214	9.89
8		98 971	71.73	43	97 300	37.55	78	63 465	9.29
9		98 971	70.73	44	97 178	36.60	79	60 541	8.72
10		98 971	69.73	45	97 048	35.65	80	57 440	8.16
11		98 970	68.73	46	96 902	34.70	81	54 140	7.63
12		98 966	67.73	47	96 736	33.76	82	50 641	7.12
13		98 957	66.74	48	96 544	32.83	83	46 971	6.64
14		98 943	65.75	49	96 317	31.90	84	43 168	6.18
15		98 923	64.76	50	96 049	30.99	85	39 254	5.75
16		98 898	63.78	51	95 733	30.09	86	35 266	5.34
17		98 870	62.80	52	95 363	29.20	87	31 247	4.96
18		98 839	61.82	53	94 934	28.33	88	27 253	4.62
19		98 806	60.84	54	94 451	27.48	89	23 347	4.31
20		98 771	59.86	55	93 924	26.63	90	19 594	4.03
21	***************************************	98 733	58.88	56	93 371	25.78	91	16 062	3.81
22		98 692	57.91	57	92 805	24.94	92	12 938	3.61
23		98 646	56.93	58	92 232	24.09	93	10 236	3.43
24		98 596	55.96	59	91 645	23.24	94	7 952	3.27
25		98 544	54.99	60	91 028	22.39	95	6 067	3.14
26	******	98 490	54.02	61	90 354	21.56	96	4 546	3.02
27		98 437	53.05	62	89 602	20.73	97	3 346	2.92
28		98 388	52.07	63	88 760	19.93	98	2 422	2.85
29		98 343	51.10	64	87 829	19.13	99	1 725	2.80
30		98 304	50.12	65	86 816	18.35			
31		98 268	49.14	66	85 729	17.58			
32		98 233	48.15	67	84 576	16.81			
33		98 196	47.17	68	83 358	16.05			
34		98 153	46.19	69	82 055	15.29			

The statistics in the above tables have been extracted from tables produced by the Commonwealth Actuary, the source data being supplied by the Australian Statistician and comprising: (i) the number of males and females living at each age last birthday, as shown by the 1981 Census; and (ii) the number of male and female deaths at each age (last birthday) in 1982.

#### True Death Rates

From a life table, the total number of years lived by the original population of 100 000 can readily be calculated. In the case of the 1983 male life table, the total number of years lived was 7 168 000. It follows that the death rate of this population may be expressed as:

 $\frac{100\ 000}{7\ 168\ 000}$   $\times$   $\frac{1\ 000}{1}$  per 1\ 000 years lived;

i.e. 13.951 deaths per 1 000 years lived.

Life table experience can be regarded as the experience of a cross section of the population in a *single year* and the above calculation derives what is known as a 'true death rate' (the Tasmanian true death rate for the 1983 male population was 13.95 deaths per 1 000 persons per annum). The true death rate is thus the reciprocal of the complete expectation of life of a person at birth multiplied by 1 000.

The true death rate for a given period is unaffected by the particular age distribution of that period, and is determined solely by the mortality experience of the period as manifested in the rate of survival from each year of age to the next. The table below sets out complete expectation of life at birth and true death rates for the periods covered by the Australian life tables:

Australian: Complete Expectation of Life at Birth and True Death Rates

	Complete exped	ctation of life h (years)	True death rate (a)		
Period	Males	Females	Males	Females	
881-1890	47.20	50.84	21.19	19.67	
891-1900	51.06	54.76	19.58	18.26	
901-1910	55.20	58.84	18.12	17.00	
920-1922	59.15	63.31	16.91	15.80	
932-1934	63.48	67.14	15.75	14.89	
946-1948	66.07	70.63	15.14	14.16	
953-1955	67.14	72.75	14.89	13.75	
960-1962	67.92	74.18	14.72	13.48	
1965-1967	67.63	74.15	14.79	13.49	
970-1972	68.10	74.80	14.68	13.37	
975-1977	69.56	76.56	14.38	13.06	
1983	72.09	78.72	13.87	12.70	

<sup>(</sup>a) Number of deaths per 1 000 in stationary (or life table) population in one year.

#### Further References

ABS Publications Produced by the Tasmanian Office:

Compendium of Local Government Area Statistics (1304.6), 1982 released December 1982.

Census of Population and Housing 30 June 1981, Characteristics of Persons in Hobart Suburbs (2201.6). Census of Population and Housing 30 June 1981, Characteristics of Persons in Launceston Suburbs (2202.6).

Census of Population and Housing 30 June 1981, Characteristics of the Population and Dwellings in Local Government Areas (2401.6).

Population Statistics, Tasmania (3204.6), annual.

Age Distribution of the Estimated Resident Population in Local Government Areas (3203.6).

Births, Tasmania (3303.6), annual.

Deaths, Tasmania (3304.6), annual.

Marriages, Tasmania (3305.6), annual.

Divorces, Tasmania (3302.6), annual.

Social Report, Tasmania 1985 (4101.6), irregular.

#### ABS Publications Produced by the Canberra Office:

Census of Population and Housing, 30 June 1981: Persons and Dwellings in Local Government Areas and Urban Centres, Tasmania (2406.0), released June 1982.

Census of Population and Housing, 30 June 1981: Summary Characteristics of Persons and Dwellings, Tasmania (2440.0), released December 1982

Australian Demographic Statistics Quarterly (3101.0). Estimated Resident Population by Sex and Age: States and Territories of Australia (3201.0), annual.

Projections of the Population of Australia (3204.0), triennial.

Projections of the Population of the States and Territories of Australia (3214.0), triennial.

Births (3301.0), annual.

Deaths (3302.0), annual.

Causes of Death (3303.0), annual.

Perinatal Deaths (3304.0), annual.

Marriages (3306.0), annual.

Divorces (3307.0), annual. Social Indicators (4101.0), biennial.

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# Chapter 6

# EDUCATION, LIBRARIES AND THE ARTS

#### SCHOOL EDUCATION

#### Introduction

In 1869 Tasmania became the first colony in the British Empire to make education compulsory. The ages for obligatory attendance at school were progressively widened: in 1898 school attendance was made obligatory between the ages of seven and 13 years; in 1912 between six and 14 years; and in 1946 Tasmania became the only Australian State to make attendance compulsory up to the age of 16, the starting age being six.

Since 1945 the task of Tasmanian educational authorities, as in other Australian States, has been to provide more schools, more teachers, better facilities and to cater for a wider range of curriculum offerings. The principal factors exerting these pressures were:

- a rapidly growing school population;
- changed attitudes to education resulting in increased demands for secondary and tertiary education; and
- general community acceptance of the need for better education.

In recent years the pressures have changed with a rapid growth in unemployment, a shrinking job market and technological changes placing new demands on education systems. In addition, Commonwealth Governments have accepted a greater financial responsibility through the Commonwealth Schools Commission and the Tertiary Education Commission.

#### Schools, Government and Non-Government

Education in Tasmania is now provided at primary, secondary and tertiary levels by government institutions and to secondary level by non-government schools. A period of 82 years in which the State accepted no financial responsibility for non-government education ended in 1967 when amendments to the *Education Act* 1932 allowed government grants to independent schools. The assistance is paid on a capitation basis and is dependent upon the level of schooling of the pupil.

In 1946 the Tasmanian Government and non-government systems of education were reorganised to provide a three, four or five-year post primary course. (The pre-war system of secondary education had comprised two stages, a three-year course followed by a two-year course; with a leaving age of 14, and with selective entry to government high schools. The proportion of pre-war pupils taking secondary education was very low.)

The dual nature of educational responsibility in Tasmania and the numbers of pupils in both government and non-government schools, in primary and secondary grades, are shown in the following table:

Particulars	1979	1980	1981	1982	1983	1984p
Government schools—						***
Primary (b)	43 996	43 938	42 706	41 406	39 598	38 314
Secondary	28 193	27 497	26 894	26 891	27 942	28 636
Special (c)	827	848	886	845	847	837
Total	73 016	72 283	70 486	69 142	68 387	67 787
Non-government schools—						
Primary (b)	8 063	8 227	8 319	8 403	8 576	8 721
Secondary grades	6 312	6 393	6 598	6 923	7 364	7 749
Special (c)	26					
Total	14 401	14 620	14 917	15 326	15 940	16 470
Total all schools	87 417	86 903	85 403	84 468	84 327	84 257

Government and Non-Government Schools, Tasmania Number of Pupils Enrolled at 1 July (a) According to Level of Education

# Kindergarten Classes and Preparatory Classes

In this chapter, the term *kindergarten* is used to describe all preschool classes, irrespective of whether they operate attached to other schools or whether they operate as separate entities. Figures are shown in a later table for enrolments in kindergartens. *Preparatory* classes, which commenced in 1974, are included in 'Primary grades'.

## The State (or Government) School System

#### Organisation

The Education Act of 1885 established an Education Department headed by a Director of Education responsible to a Minister. In the present system, professional and administrative functions are vested by the Education Act (1932-1982) in the Director-General who is responsible to the Minister for Education. Following a review of efficiency and effectiveness, a major reorganisation of the Education Department commenced in 1983. In managing the system of education, the Director-General is assisted by a Deputy Director-General, three Executive Directors (Education Programs, Resources and TAFE) and five Deputy Directors plus central and regional administrative units.

Day to day administration of schools and colleges is organised on a regional basis. The three Regional Directors (North, North-West and South) are responsible to the Director-General and have their headquarters in Launceston, Burnie and Hobart respectively. They are supported by superintendents with experience and responsibilities in Early Childhood, Primary and Secondary education. Their offices are also responsible for a wide range of services to schools, colleges and the community.

# The School System

Education in Tasmania is based on a neighbourhood school approach. It is compulsory between the ages of six and 16 although special exemptions may be obtained. Education is secular and free but most parents either purchase or contribute towards purchase of books, materials, and some equipment. Transport to school is either provided by the Department (generally in rural areas) or subsidised where daily costs on public transport exceeds 60 cents. Children may commence full-time education in a preparatory grade after which there is a general pattern of schooling made up of six years of primary education followed by six years of secondary education.

<sup>(</sup>a) From 1980; previously 1 August.

<sup>(</sup>b) Excludes kindergarten classes.

<sup>(</sup>c) Includes pupils in special classes attached to ordinary schools.

# Expenditure on Education

The following table shows expenditure on education from State Government funding sources. Included are payments for the provision of educational facilities by those departments other than the Education Department:

State Government Expenditure on Education by Purpose, Tasmania (\$ million)

Purpose	1981-82	1982-83 P
University education	33.2	34.0
Technical and further education	18.3	20.5
Other higher education	11.8	14.2
Primary and secondary education	153.9	158.7
Preschool education (includes special education)	9.0	12.0
Transportation of students	7.5	8.4
Other education	29.5	43.9
Total	263.2	291.8

#### Enrolment

Enrolments in government schools for the last six years were:

Government Schools, Tasmania Number of Pupils at 1 July (a)

Pupils	1979	1980	1981	1982	1983	1984
Boys	37 545 35 471	37 076 35 207	36 231 34 255	35 623 33 519	35 308 33 079	35 025 32 762
Total	73 016	72 283	70 486	69 142	68 387	67 787

<sup>(</sup>a) From 1980; previously 1 August. Excludes kindergarten classes.

# Age of Pupils in Each Class

The following table summarises the system of government schooling in Tasmania showing the average ages of pupils in each grade and the type of certificate issued for final year examinations:

Government Schools, Tasmania Average Ages of Pupils, Primary and Secondary, in Each Grade, and Certificates Issued

Pre-prim	primary class	es		Sec	ondary classes	
Grade	Mean age at 1.7.84			Mean ag	ge at 1.7.8	
	Years	Months	Grade	Years	Months	Certificate issued
Kindergartens—						
Separate	4	11	7	12	8	**
Attached	4	11	8	13	8	••
Preparatory	5	7	9	14	8	Preliminary School Certificate
1	6	7	10	15	8	School Certificate
2	7	7	11	16	11 )	
3	8	7	12	17	11	Higher School Certificate
4	9	7				
5	10	7				
6	11	7				

# Number of Government Schools

The following table shows the number of government schools in Tasmania:

	(u)								
Type of school	1979	1980	1981	1982	1983	1984			
Kindergartens (sep-									
arate)	35	32	32	30	30	28			
Primary (b)	160	167	169	170	169	168			
Special	20	23	24	25	23	23			
District	7	2	1	1	1	1			
District high (c)	25	25	25	25	25	25			
High	35	34	34	34	34	35			
Secondary colleges .	7	5	3	3	7	8			
Community colleges.		3	5	4	_	_			
Total	289	291	293	292	289	288			

Number of Government Schools, Tasmania, at 1 July (a)

#### Kindergarten Education

Within the general pattern of primary education, Tasmania provides four years of early childhood education. Until 1969, preschools were established on the initiative of groups of parents. The Department provided buildings but eventually recovered half its outlay from parents. Commencing in 1969 all new facilities for preschool education were provided in kindergartens attached to primary schools. At present there are kindergartens which are part of primary schools and others which are not attached to primary schools. Policy aims to provide kindergarten for children who are four years and over on January 1 of any given year. Age of entry to preparatory classes is 5, and 5½ to 6½ to year 1.

Enrolments in Kinder	gartens, Tasmar	nia, at 1	July (a)
----------------------	-----------------	-----------	----------

Particulars	1979	1980	1981	1982	1983	1984
Kindergartens— Separate	1 388 5 103	1 116 5 163	1 043 4 800	1 039 5 140	975 5 292	923 5 286
Total	6 491	6 279	5 843	6 179	6 267	6 209

<sup>(</sup>a) From 1980; previously 1 August.

#### State Primary Schools

Primary schools seldom enrol more than 600 pupils and are located close to pupils' place of residence. Most have six grades in addition to kindergarten and a preparatory class. In rural areas either small primary schools, district or district high schools have primary years and draw many pupils from outlying localities. Free transport has made this possible and is an example of the high priority given to meeting the educational needs of children in rural areas. Classes are usually heterogenous with teachers devising programs for children of various ability levels. Pupils progress on an age/year basis rather than on promotion by ability. The ages and numbers of pupils receiving primary education in government schools are as follows:

Ages and Numbers of Pupils Receiving Government Primary Education (a), Tasmania, at 1 July (b)

Age last birthday (years)	1979	1980	1981	1982	1983	1984
Under 6	2 662	3 194	3 070	2 984	2 961	3 153
6	6 334	6 190	5 966	5 662	5 513	5 467
7	6 618	6 381	6 078	5 992	5 614	5 468
8	6 977	6 766	6 352	5 988	5 814	5 567

continued next page

<sup>(</sup>a) From 1980; previously 1 August.

<sup>(</sup>b) Most have kindergartens attached.

<sup>(</sup>c) The secondary facilities of these schools have been upgraded to full high school standard.

Ages	and	Numbers	of	Pupils	Receiving	Government	Primary	Education	(a),	Tasmania,	at	1	July
				_		(b)—contin	nued						

Age last birthday (years)	1979	1980	1981	1982	1983	1984
9	6 674	6 928	6.732	6 323	5 957	5 818
10	6 925	6 720	6 904	6 671	6 157	5 869
11	6 244	6 338	6 317	6 622	6 384	6 019
12	1 511	1 322	1 240	1 133	1 176	927
13	50	97	46	31	21	25
14	1	2	1		1	1
15 and over				-		_
Total—Boys	22.759	22 699	22 094	21 395	20 481	19 825
Girls	21 237	21 239	20 612	20 011	19 117	18 489
Total pupils	43 996	43 938	42 706	41 406	39 598	38 314

<sup>(</sup>a) Excludes pupils in special schools and classes.

Primary Curriculum: The primary school curriculum is designed to cater for the intellectual, physical, social, and emotional development of children during their critical formative years. The curriculum emphasises acquisition of basic language, writing and number skills within the wider context of developing a capacity to communicate, think and value. The school's task is to provide programs that enable each pupil to develop skills appropriate to their stage of development and that will foster further learning. These programs also provide for creativity, arouse the imagination, as well as giving the opportunity to develop initiative and logical thought processes.

# Special Schools and Special Classes

General policy is directed towards integrating children with special needs into normal schools. Special schools provide for children with different forms of handicap and who are unable to benefit from instruction in normal schools.

Instruction varies according to the type of handicap and where it is physical the main need is to maintain normal or near normal individual programs. Schools and classes for intellectually handicapped children follow a program that is tailored to meet individual needs.

A Superintendent of Special Education has statewide responsibilities in this field and is supported in each region by the superintendents.

#### Government Secondary Schools

Almost all children attend secondary classes starting at an age ranging from 11½ to 13 years. The first four years of secondary education (years 7 to 10 inclusive) are catered for in high schools or district high schools, which are non-selective, comprehensive, and provide a broad general education. All, with the exception of two high schools in Hobart, are co-educational. The final two years (11 and 12) are completed in a secondary college.

All high schools have a number of feeder primary schools. Pupils enter high school at the end of year 6. In the first two years (7 and 8), emphasis is on a general education. This becomes more specialised in the final two years (9 and 10). Many schools use ability grouping in subjects at this level to allow development of programs suited to particular pupils.

The age and number of pupils, by year level and sex, attending government secondary schools are shown by the following tables: (Note: The figures include year 11 and 12 pupils who attend secondary colleges.)

<sup>(</sup>b) From 1980; previously 1 August.

Age last birthday (years)	1979	1980	1981	1982	1983	1984			
10		1							
11	205	364	212	160	185	176			
12	4 588	4 793	5 284	5 185	5 425	5 375			
13	5 790	5 967	6 091	6.536	6 292	6 450			
14	6 273	5 948	5 887	5 943	6 419	6 248			
15	6 229	5 791	5 437	5 472	5 880	6 004			
16	2 892	2 633	2 260	2 167	2 293	2 604			
17	1 423	1 287	1 311	1 078	1 002	1 278			
18 and over	793	713	412	350	446	501			
Total—Boys	14 296	13 868	13 599	13 715	14 313	14 695			
Girls	13 897	13 629	13 295	13 176	13 629	13 941			
Total pupils	28 193	27 497	26 894	26 891	27 942	28 636			

Pupils Receiving Government Secondary Education (a), Tasmania, at 1 July (b) by Age

The next table shows the number of secondary pupils by sex and grade in all government schools:

Secondary Pupils in Government Sc	nools, Tasmania, a	t 1 Jul	ly <i>(a)</i> b	v Year Level
-----------------------------------	--------------------	---------	-----------------	--------------

	Year		Secondo	ary level				Total
		7	8	9	10	11	12	Totat
			Во	oys				
1979		3 151	3 103	3 351	3 036	857	798	14 296
		3 115	3 119	3 064	2 967	818	785	13 868
1981	***************************************	3 342	3 073	3 051	2 641	843	649	13 599
1982		3 342	3 316	3 041	2 678	754	584	13 715
1983	***************************************	3 413	3 322	3 271	2 723	961	623	14 313
1984		3 305	3 376	3 314	2 986	1 000	714	14 695
			Gi	rls				
1979	••••	2 941	2 945	3 024	2 847	1 142	998	13 897
1980	***************************************	2 895	2 934	2 891	2 766	1 164	979	13 629
1001		3 120	2 873	2 877	2 668	958	799	13 295
1982	•••••	3 035	3 113	2 818	2 607	954	649	13 176
1983	••••••••	3 161	3 026	3 067	2.583	1 053	739	13 629
1984		3 136	3 148	2 983	2 798	1 078	798	13 941

<sup>(</sup>a) From 1980; previously 1 August.

Current policy is directed towards educating children in their local communities. There has been positive discrimination towards country children and steps have been taken to make the secondary education available in district high schools comparable with that provided in urban high schools. One isolated school still has a small secondary population and parents who wish their children to have a wider range of opportunities than can be provided locally may enrol children in high schools. These students board in departmental hostels in larger centres. Assistance, through conveyance allowances, may be provided by the Department.

The high school curriculum provides a general, comprehensive education within a framework of subjects endorsed by the Schools Board of Tasmania. Most year 7 and 8 pupils follow a common course, developed by the school, and suited to their needs. In years 9 and 10 a wide range of academic, technical and cultural subjects provide the basis for

<sup>(</sup>a) Excludes pupils in special schools and classes.

<sup>(</sup>b) From 1980; previously 1 August.

pupils to choose a program that satisfies School Certificate requirements as well as allowing them to follow personal interests. Subjects are generally assessed at three levels but some are only offered at the most demanding level 3 and others are not offered beyond level 2.

## Teaching Methods and School Design

In recent years the school curriculum has undergone considerable change both in subject matter and teaching methods. While schools have responsibility for developing their own curriculum they operate within subject guidelines and Schools Board requirements.

Teaching methods also reflect the changed nature of learning with teachers using a wide variety of teaching approaches, materials and equipment. This allows school programs to be adapted to meet the varying needs, abilities and interest of pupils. Grouping in schools can be on an age, year or ability basis with promotion generally being according to age. Some schools have adopted composite grading which allows pupils, in certain subjects, to work at their own level of competence.

School design has also adapted to cater for the variety of teaching approaches. Current policy requires new primary schools of a standard plan with single and dual classrooms, annexes for small groups and larger general purpose areas. Most schools have also adapted classroom spaces to allow for a more flexible organisation of the learning program.

# Secondary Colleges

Since July 1983 the provision of Higher School Certificate (HSC) and Technical Education (TAFE) has been separated. The Deputy Director-General is now responsible for administration of secondary colleges and is assisted by a superintendent.

Seven secondary colleges operate within the State. The first was the Hobart Matriculation College (previously Hobart High School) - no junior students were enrolled after 1961 and by 1965 all students were attempting matriculation. In 1967 Launceston High School reached this stage and in 1968 the Elizabeth Matriculation College, in Hobart, was opened and elimination of junior classes was completed by 1970. In 1973 the newly constructed Rosny College was opened to serve the eastern shore suburbs of urban Hobart and the new Don College was opened at Devonport. Alanvale College at Launceston was opened in 1975 while the Hellyer College at Burnie was opened in 1976 to replace Higher School Certificate classes previously available at Burnie High School. Originally the prime purpose of these colleges was to concentrate specialist Higher School Certificate teaching in a few centres. The students also benefited from an intermediate step between high school and tertiary education.

General admission policy of the colleges is one of 'open door' to most courses and enrolments are of students who have passed the age of compulsory attendance. The majority of students studying HSC subjects are in their fifth and sixth year of secondary education. In recent years there has been a decline in the number of students passing directly from high schools but there has been a considerable increase in mature-age students studying HSC subjects.

The secondary colleges have also developed a wide range of offerings not specifically tied to the traditional HSC subjects. These aim to satisfy the needs of the more diverse group of the student population enrolling. Some of these subjects have been incorporated into the HSC Unit Subjects structure being developed by the Schools Board; others have remained college based subjects. Colleges have expanded significantly into the area of late afternoon and evening programming of classes for the large number of adult part-time students seeking a range of options from academic HSC to elective and recreational pursuits. In the latter area co-operation with Adult Education has occurred to ensure the appropriate development of a rationalised offering of community education courses. Courses for unemployed youth, work experience programs, transition education courses and increased emphasis on vocational guidance have resulted in the colleges becoming

more effective in meeting the needs of those students not wishing to proceed with HSC studies.

Councils have now been established for colleges and these are beginning to demonstrate an increasing degree of community involvement in planning and college governance.

# Assessment and Certification

As a result of the proposals of the Schools Board and the Radford Report, the Schools Board was re-constituted with a membership of 21 on 1 September 1966, to allow the Board to become, in 1969, the sole examining and certifying body at the secondary level. A further amendment to the Act in 1974 made provision for the Council of Advanced Education to nominate members, and increased the membership of the Board to 23 as from 1 July 1974.

An important change of considerable significance to employers, and to the prerequisites they demand of applicants for employment, occurred when new types of certificates were introduced in 1969. There are only two such certificates issued, known as the School Certificate and the Higher School Certificate. These replaced all previous certificates which were group certificates demanding, in varying degrees of detail, certain compulsory subjects or groups of subjects as prerequisites to the award of the certificate. The essential difference is that both of the new certificates are subject certificates requiring no compulsory subjects or groups of subjects to be studied.

### The School Certificate

The subjects for this certificate may be taken at various levels and a wide choice is available to cater for different levels of ability and interest. A preliminary award may be granted to those candidates who leave school without qualifying for a full award in a subject. The full award will be granted to candidates who successfully complete the full syllabus in a subject. The certificate will be awarded as a result of a system of regional moderation which has been developed to ensure comparability of standards between schools.

## The Higher School Certificate

Candidates normally sit for Higher School Certificate subjects at the end of the fifth and sixth years of secondary education. The certificate is awarded as a result of assessments completed in November each year. Subjects may be studied at Level II or Level III, but both levels are not necessarily available for all subjects.

From 1982 awards in all Level III subjects have been determined by a combination of an external examination component and a standardised school assessment component. The weighting of the standardised school component must be not less than 25 per cent and not more than 50 per cent of the final result. The exact percentage of the weighting is determined by the Schools Board of Tasmania on the recommendation of the appropriate Subject Committee.

Syllabuses in subject areas offered at Level II where a Level III syllabus also exists provide for those who wish to take a terminal course in a subject as well as for those who require a foundation course before proceeding to the study of a Level III subject. In any one year no candidate may enter for both a Level II subject discussed above and the Level III subject in the same subject field.

Requirements for matriculation are determined by the University of Tasmania from the results of the Higher School Certificate assessments conducted by the Schools Board of Tasmania.

#### Non-Government (or Independent) Schools

Non-government schools have played a valuable part in Tasmanian education. Policies are framed by principals in conjunction with their senior staff and with the approval of their governing bodies or church.

### Registration

Non-government schools and teachers are subject to the regulations of the Teachers and Schools Registration Board. This Board consists of nine members who hear and determine all applications for registration and keep a record of all teachers and schools not administered by the Education Department. Every school is graded and teachers are registered in one or more classifications or as special subject teachers. 'Provisional' teachers are those gaining qualifications so they can be registered. The Board may prescribe the mode of classifying teachers, the course of study and training required, the examinations to be passed, and the recognition of overseas qualifications. To secure registration, schools must provide for proper access, drainage, light, ventilation and sanitary conveniences, and inspections may be made by officers appointed by the Board. A daily register of attendance has to be kept.

#### State Assistance to Non-Government Schools and Pupils

The Education Act 1932 was amended in 1967 to provide for direct payments to non-government schools. Currently the total level of assistance is calculated by taking 23 per cent of the estimated costs of educating a pupil in government primary and secondary schools and multiplying the amount by the number of pupils registered in non-government schools at 1 July each year. In 1982-83 this expenditure amounted to \$6 800 437. Additional assistance is paid to help schools in meeting interest payments on certain loans. The amount of the subsidy in 1982-83 was \$300 000. From the beginning of 1970 the Commonwealth Government also provided per capita grants to independent schools. Details are contained in a later section dealing with Commonwealth Government Activities in education.

Apart from these subsidies, benefits include: free or subsidised transport; use of the facilities of the Department's curriculum centre, media centre, and speech education and guidance branches; attendance at trade and domestic science classes if room is available; and attendance by teachers at Departmental schools of method.

#### Enrolment at Non-Government Schools

Most non-government school pupils are in schools controlled by religious denominations, as the next table shows:

Non-Seventh-Other Christian Denomin- Denomin-AllYear and sex Anglican Catholic dav ational schools Adventist Brethren ations Pupils 6 730 292 1978 .....Boys 888 4 745 733 7 521 992 277 Girls 818 5 3 5 1 83 1979 .....Bovs 915 4 741 88 708 322 6774 983 287 7 627 82 Girls 809 5 466 1980 .....Boys 89 697 368 6 9 3 7 1 005 4778 996 341 7 683 89 5 467 Girls 790 7 156 99 705 423 1981 .....Boys 1 057 4872 96 7 761 992 418 5 481 Girls 774 1 080 4 9 4 7 46 737 492 7 390 1982 .....Boys 88 1 007 462 7 9 3 6 5 5 3 2 57 Girls 793 85 7 706 1983 .....Boys 1 132 5 064 93 46 782 589 59 532 8 234 5 665 92 1116 Girls 770 Schools 4 12 70

38

3

Pupils Enrolled in Non-Government Schools Tasmania, at 1 July (a) (Number)

1984 .....

<sup>(</sup>a) From 1980; previously 1 August.

The following table shows the number of secondary pupils by sex and year level in all non-government schools. A further 30 un-graded students are not included in the table.

Secondary Pupils in Non-Government Schools, Tasmania, at 1 July 1984p, by Year Level

Pupils	Year level						
	7	8	9	10	11	12	Total
Boys	n.y.a. n.y.a.						
Total	1 664	1 688	1 601	1 485	760	521	7 719

Of the 30 schools in 1984 which catered for secondary pupils, 16 had Higher School Certificate classes.

Most non-government school pupils are to be found in primary classes, with the majority enrolled in Catholic schools. The following table shows the numbers and ages of all pupils in non-government school primary and sub-primary classes:

Pupils Receiving Non-Government Primary Education, Tasmania, at 1 July (a) by Age

Age at last birthday (years)	1978	1979	1980	1981	1982	1983
Under 7	2 033	1 985	2 056	2 010	2 050	2 133
7	1 164	1 136	1 131	1 107	1 083	1 149
8	1 120	1 176	1 172	1 173	1 142	1 176
9	1 096	1 199	1 225	1 208	1 234	1 202
10	1 114	1 136	1 202	1 306	1 305	1 271
11	1 077	1 118	1 207	1 246	1 334	1 346
12	253	298	232	249	248	283
13	12	15	252	20	- 15	13
14 and over	2	_	_	_	2	3
Total—Boys	3 832	3 879	3 984	4 100	4 144	4 208
Girls	4 039	4 184	4 243	4 219	4 259	4 368
Total pupils	7 871	8 063	8 227	8 319	8 403	8 576

<sup>(</sup>a) From 1980; previously 1 August. Excludes kindergarten pupils.

The following table shows the ages of pupils in non-government schools at secondary level:

Pupils Receiving Non-Government Secondary Education, Tasmania, at 1 July (a) by Age

				, , , , , , , , , , , , , , , , , , , ,		
Age last birthday (years)	1978	1979	1980	1981	1982	1983
11 and under	69	65	121	94	90	89
12	1 047	1 000	1 144	1 285	1 226	1 428
13	1 292	1 257	1 307	1 393	1 704	1 510
14	1 316	1 236	1 314	1 338	1 395	1 620
15	1 271	1 347	1 262	1 248	1 227	1 332
16	813	847	768	780	767	863
17	458	445	391	390	453	450
18 and over	90	115	86	70	61	72
Total—Boys	2 892	2 882	2 953	3 056	3 246	3 498
Girls	3 464	3 430	3 440	3 542	3 677	3 866
Total pupils	6 356	6 312	6 393	6 598	6 923	7 364

<sup>(</sup>a) From 1980; previously 1 August.

#### **Teachers and Teacher Training**

There is a variety of teacher training courses available to trainee teachers in this State. The University of Tasmania awards the Diploma of Education after a one-year post-graduate course in which graduate students train as infant, primary or secondary

teachers. Since 1975, a four-year course leading to the degree of Bachelor of Education has been provided and a Master's degree is also offered. There is also a post-graduate course leading to the degree of Bachelor of Special Education.

The Tasmanian College of Advanced Education provides both a three-year course leading to a Diploma of Teaching and a four-year Bachelor of Education course. A course is provided for full-time and part-time graduate students leading to the degree of Master of Education. Large numbers of practising teachers also enrol in courses with the Centre for Continuing Education of Teachers thereby gaining extra qualifications which may lead to diplomas and degrees.

The Department provided studentships for teacher training at either the Univeristy of Tasmania or the Tasmanian College of Advanced Education. Since 1980 there has been a considerable reduction in the number offered and in 1983 and 1984 there were no new studentships. Training institutions continue to enrol the number of students predicted to be required by Tasmanian schools.

The following table shows the number of teachers and teachers-in-training in Tasmanian government schools:

Full-Time Teaching	Staff in Covernment	t Schools (a) and Instructors.	Tacmania at	1 Inly (h)

				*	,	
Type of teacher	1978	1979	1980	1981	1982	1983
Principals—						
Males	218	224	231	229	226	223
Females	29	25	28	20	28	35
Other teachers—						
Males	1 692	1 669	1 909	1 966	2 007	1 981
Females	2 896	2 848	3 088	3 061	3 160	3 043
Total teachers (a)—Males	1 910	1 893	2 140	2 195	2 233	2 204
Females	2 925	2 873	3 116	3 081	3 188	3 078
Ceachers-in-training—		•				
Males	509	527	448	333	240	125
Females	1 231	1 240	1 073	900	636	373

<sup>(</sup>a) Includes teachers in non-teaching positions (e.g. curriculum branch staff, guidance officers, etc.) but excludes supervisors, those engaged in technical education, part-time teachers, and those on long service leave.

The following table shows the number of teachers and instructors in Tasmanian Government schools (excluding technical colleges):

Number of Government School Teachers and Instructors (a), Tasmania, at 1 July 1983

	Full-time			Part-time and casual		
Type of school	Males	Females	Persons	Males	Females	Persons
Kindergarten	5	148	153		35	35
Special	40	100	140	4	49	53
Primary	496	1 566	2 062	9	365	374
District—						
Primary	1	3	4	_	1	1
Secondary		_		2	2	4
District High—				_	_	•
Primary	69	214	283	2	30	32
Secondary	210	130	340	5	39	44
High	959	702	1 661	26	51	77
Secondary colleges	251	118	369	138	161	299
Total	2 031	2 981	5 012	186	733	919

<sup>(</sup>a) Excludes teachers in non-teaching positions (e.g. curriculum branch staff, guidance officers, speech education, music and training aid centres).

<sup>(</sup>b) From 1980; previously 1 August.

In primary schools in 1983, 76 per cent of the full-time teachers were females. All subjects are taught by each teacher in these schools but itinerant teachers, when available, take physical education, music and speech classes on a circuit basis with each teacher being responsible for the teaching of the subject in several schools. In the post-primary schools, most teachers are specialists attached to subject departments within each school. In the district high schools, because of the smaller numbers of secondary pupils one teacher may take several subjects; rural science, home arts and crafts and technical subjects are usually handled by resident or itinerant specialists.

Teacher Training: Numbers of teachers-in-training for recent years are shown in the next table:

Teachers-in-Training.	Tasmania, at	1 July (a)

<b>3</b> ,,									
Institution attended	1978	1979	1980	1981	1982	1983			
	Male	s							
University of Tasmania	210	195	152	158	115	62			
Education	295	329	296	174	124	63			
Specialist trainees	4	3		1	_ 1	_			
Total	509	527	448	333	240	125			
	Femal	es							
University of Tasmania Tasmanian College of Advanced	360	342	244	403	316	165			
Education	847	869	813	483	309	203			
Specialist trainees	24	29	16	14	11	5			
Total	1 231	1 240	1 073	900	636	373			

<sup>(</sup>a) From 1980; previously 1 August.

#### TECHNICAL AND FURTHER EDUCATION

The Division of Technical and Further Education (TAFE) provides paraprofessional, trade, other vocational, preparatory vocational and adult education programs throughout Tasmania.

The Division is headed by the Executive Director, who is supported by a Deputy Director (TAFE) and a Senior Superintendent (Adult Education). It runs colleges in Hobart, Launceston, Devonport, Burnie and Queenstown, and a number of separately provided but administratively linked Adult Education Centres. Centres in Smithton, Scottsdale, Campbell Town, Oatlands and Huonville provide a more limited range of course offerings. The following table shows the number of colleges, teachers and students for 1983:

**Technical and Further Education 1983** 

	Technical	Adult education	Total
No. Institutions	6	12	18
No. Teachers—			
Full-time	494	(a)18	512
Part-time	1 010	1 069	2 079
No. Students—			
Full-time	1 891	_	1 891
Part-time	14 703	17 018	31 721

<sup>(</sup>a) Adult education full-time 'teachers' are primarily administrators.

External Studies/Correspondence Courses are administered through the Hobart Technical College's External Studies Service. They are intended for isolated students and others who are unable to attend regular classes. Many of the Certificate and HSC courses are available. However, the block training system has replaced a number of the apprentices' courses.

Vocational Courses provide for non apprentice training and include engineering, fashion, clothing manufacture, supervision, commercial and secretarial studies, business studies, child care, welfare studies and computing.

A significant number of students now undertake prevocational (trade-based) courses and special school to work transition studies.

Teacher Education courses for TAFE teachers were introduced through a Diploma course at the Tasmanian College of Advanced Education (Launceston). This course will enable teachers to up-grade their qualifications to diploma level. In-service education is also available for non-formal staff development and includes seminars, interstate conferences plus courses and conferences conducted by Tasmanian industrial and commercial organisations.

Examinations are conducted by the Education Department in July and November each year. Papers are set and marked, or assessments carried out on a statewide basis, except for the first and second year trade subjects in which cases each college makes its own arrangements.

#### **Technical Education**

Colleges and Courses

Compulsory schooling ends at age 16 and pupils have a number of choices:

• to try to find employment;

 to attend a further education college before entering tertiary institutions or the workforce; or

• to combine employment with part-time study at a further education college (as in the case of trade apprentices).

TAFE Certificate courses cater for middle level vocations between the trades and professions. They are designed in consultation with industry to meet the increasing needs of para-professional personnel in areas such as engineering, accounting and social welfare. On successful completion of a course a certificate is awarded by the Education Department.

Trade courses combine theoretical and practical aspects of the trade and are complementary to employer training given to apprentices. From 1965 apprentices have been required to attend one full day per week for three years and this almost has eliminated evening classes for apprentice training. Since 1968 block training has operated for a number of trades and for apprentices previously taught by correspondence. During the year, periods of two weeks are spent in full-time study in a technical college. These courses are offered in association with the Apprenticeship Commission and a Certificate of Trade Proficiency is awarded upon successful completion of the course. With the introduction of trade courses in farming and horticulture in 1979 the definition of these courses has been widened. Post trade courses are also available to extend the skills and knowledge of tradesmen.

#### **Adult Education**

Establishment of a mechanics' institute in Hobart in 1827 was the start of adult education in Australia. Mechanics institutes, later established in other cities, provided public lectures and libraries. The first Tasmanian Workers Education Branch was begun in Hobart in 1913 to promote the higher education of working men and women. For many years the WEA worked in conjunction with the University of Tasmania and provided classes and public lectures.

From 1948 to 1975 adult education was administered by a statutory board established under the *Adult Education Act* 1948. From 1 January 1976, the *Education Act* (No. 2) 1975 came into force, which proclaimed an advisory Adult Education Board and a Division of Adult Education within the Education Department. Adult education is now a section of the Division of Technical and Further Education.

Hobart has five Adult Education Centres: at the Domain, Claremont, South Hobart, North Hobart and Rosny College. There are also centres and offices established in Launceston, Devonport, Burnie, Queenstown, Oatlands, Campbell Town and Kingston.

## **Operations**

An extremely wide variety of courses, ranging in duration from one term to one year, is offered. A function of the Division is to initiate innovatory programs and to respond to changes in community needs. Subject areas include basic education, business studies, foreign languages, arts and crafts and music and dance.

In co-operation with the Commonwealth Department of Immigration and Ethnic Affairs, adult education arranges courses in Hobart in English for migrants and other courses for migrants throughout the State.

The increased range and number of courses continues to respond to the arrivals of migrants and refugees. The Adult Migrant Centre continues to offer a self access learning centre to extend opportunities and encourage migrants to learn English in their own time and at their own pace.

The use of a computer system in the south continues to include staffing and financial information on adult education. Other regions are achieving computerised Adult Education enrolments. The outstanding success of this system attracted considerable interest from other States. Demand for adult literacy programs has increased dramatically with an average of 500 trained volunteers providing instruction in one-to-one teaching situations.

The Northern Region School for Senior Citizens program consists of a variety of subjects from English literature to gardening science.

The diverse summer school program attracts students from throughout Australia. Events such as art exhibitions, music recitals and drama events are often arranged in association with other groups as part of the Division's involvement in community arts.

Discussion groups are held throughout the State on a monthly basis to study books and other material of educational value. This joint service given by the State Library and the Education Department continues to be in keen demand.

'The Grange' Residential College at Campbell Town, with accommodation for 30 students, has been leased from the National Trust since 1964. This old colonial country home built in 1848 is one of only two adult education residential colleges in the country and is recognised by educationalists as an institution of unusual worth. The building is used constantly for weekend courses as well as week-day educational and training programs.

The Statewide Literacy Unit took responsibility for the Colony 47 Reading Unit in October 1983. This community based centre offers an alternative to the general Adult Education Literacy Program. Although the Centre will maintain its community profile and its priority for catering for youth and the handicapped, it is envisaged that its scope in providing Basic Skills courses which integrate learning, reading, writing and basic maths, will widen. Because of their liaison with the Statewide Unit, the Colony 47 Unit will benefit by being drawn into a wide scope of activities and suffer less from its previous isolation.

The Statewide Literacy Unit also took initiative in developing a special Basic Education Program for Aboriginal Adults, which works statewide.

#### Other Educational Matters

#### Curriculum Development

In recent years the school curriculum has undergone considerable change both in subject matter and teaching methods. While schools have responsibility for developing their own curriculum they operate within subject guidelines and Schools Board requirements. The Curriculum Centre and Subject Supervisors are the two principal groups responsible for curriculum development. Both respond to schools by the following activities:

- assisting schools with curriculum development and evaluation;
- the improvement of teaching practices;
- developing learning material; and
- contributing to policy making and administrative aspects of curriculum development.

As part of the reorganisation process during 1984 the Curriculum Services Branch will assume these responsibilities.

The Curriculum Centre's purpose is to facilitate the introduction of new ideas and practices to improve children's learning. Tasks which Centre officers are expected to perform can be grouped as follows:

- special projects;
- involvement with statewide curricula;
- facilitating school-based curriculum review and development;
- publications and information.

Most officers are involved, at some time, with all of these tasks, which are inter-related and supportive of each other.

The Curriculum Centre provides assistance to committees which have responsibility to develop or revise State or system-wide guidelines. In recent years system initiatives have resulted in the development of guidelines in areas such as primary language, physical education, primary mathematics, secondary science, consumer education and handwriting. Also, after trials, a Legal Studies Course has received full HSC status. The wide appeal and the innovative teaching methods employed has created high enrolments in this course.

Activities of and funding from agencies external to the system, generate a wide variety of curriculum projects in the Centre; for example:

- Transition from school to post school life (including co-ordination of a statewide work experience program);
- Antarctic and Southern Ocean Project;
- Aboriginals in Tasmania;
- Education of Girls Projects;
- Multi-cultural Approaches in Tasmanian Education;
- Bowen Park and Port Arthur Historic Sites;
- Health Education Projects (Primary and Secondary); and
- Tasmanian Tourism Education Project.

## Professional Development

The Centre for the Continuing Education of Teachers provides part-time study programs for practising teachers in co-operation with the Education Department, Tasmanian College of Advanced Education and University of Tasmania. Administration of the Centre is undertaken by the Education Department (Services Division) and its formal study program is administered by an executive board representing the Education Department, the institutions providing courses and part-time teaching staff and two teacher organisations.

Courses offered range from basic certification for teachers to advanced level study programs linked with University and TCAE Education Degree courses.

The Department has placed a high priority on development of programs for senior staff. A primary school program commenced in 1980 and is aimed at fostering a better understanding of the education system, of the basic functions and principles of management, to improve confidence and competence in management practices and to enable senior staff to support the development of teachers at the school level.

A similar program for senior-masters and senior-mistresses in secondary schools commenced in 1982. It has been developed in co-operation with the University of Tasmania and the Tasmanian College of Advanced Education. The assistance of those institutions also has been offered in a resource teacher program and a conversion (re-training) course to meet specific system needs.

Other development activities are provided in addition to the CCET courses. These consist of a limited number of longer courses of more than ten days, short courses of one to three days, school-based seminars, inter-school visits by teachers and meetings held out-of-school hours.

#### Media Services

The Tasmanian Media Centre provides specialised assistance by the development, production, and supply of audio-visual materials and equipment.

The Centre offers the following types of services:

- selection, installation and maintenance of audio-visual equipment in Tasmanian schools;
- evaluation and purchase of audio-visual media 16mm films, kits, slides, audio tapes, videotapes - for loan through the Centre's Media Library; resource material is now available for sale;
- production of audio-visual resource material based on curriculum changes and needs — often in the form of multi-media kits;
- access sessions, seminars, workshops and a mobile media in-service program to publicise the availability of the Centre's resources and services;
- advice and assistance to individual Tasmanian schools in relation to resource management and organisation.

The Centre also operates two regional annexes in Launceston and Burnie which offer media resources and services to teachers.

# Computer Education

The Education Department of Tasmania's Elizabeth Computer Centre is responsible for supporting the development of computing in Tasmanian schools. Over the years the Centre has expanded into a statewide computer network consisting of more than 225 computer terminals linked to seven computers in Hobart, Launceston, Devonport and Burnie. The network, called TASNET, provides links to all further education and secondary colleges, all high schools, including several district high schools, one primary school, as well as Education Department offices.

Computer terminals are linked to the computers via special-purpose telephone lines, rented on a yearly basis from Telecom. The recurrent expense of Telecom lines (calculated on the distance of the school from the nearest computer) previously has been a major barrier for country schools wishing to join the network.

However, recent advances in electronic technology now provide schools with a suitable solution to this problem without the high cost of line rentals. The microcomputer, a small, portable, stand-alone computer packaged inside a keyboard used for input of data, connected to an ordinary TV screen for output of data, and utilising small floppy disks for storage, now is commercially available at a reasonable cost. There are over 600 microcomputers in schools, with the largest growth area being in the primary sector where schools are using the Computer Assisted Learning (CAL) programs developed by the Elizabeth Computer Centre.

High schools usually have purchased microprocessors in addition to their TASNET terminals. Several district high schools currently are using only microcomputers. However, it is possible for the microprocessor to be linked as a terminal through an acoustic coupler and the ordinary telephone network.

#### Museum Services

These services operate from the Tasmanian Museum and Art Gallery (Hobart) and the Queen Victoria Museum and Art Gallery (Launceston). Education Department officers provide support for school visits and develop activity material. Collections in many fields are also offered on loan to schools. A 'travelling service' is also available from both centres. In the south a 'Musbus' accompanied by an Education Officer brings displays to schools. A railway carriage provides a similar service to schools in the north and north-west.

# Library Services

The Library Services Branch offers expert bibliographic and technical advice to schools. The Branch also provides the administration on standards and policies relating to development of efficient and educationally effective libraries.

A centralised cataloguing service (TASCIS) produces cards for newly acquired publications. This service is available to schools either by way of any computer terminal of the TASNET system or by order from the Branch.

#### Research

Research within the Department is carried out by officers within the Executive Support Services and by officers within the Curriculum Development and Evaluation Section. These officers collect, interpret and disseminate research information and assist with using information to help develop departmental policy.

The results of major research projects are published in a research studies series. Recent publications are:

- No. 89 Roberts Tests of Articulation and Expressive Language School Trial;
- No. 90 Language Skills in Infant School Children with a Temporary Hearing Loss;
- No. 91 1983 Survey of Basic Reading Skills of 14 year old Tasmanian Students;
- No. 92 The PACT Project (Parents Assist Children and Teachers);
- No. 93 Evaluation of TAFE Programs;
- No. 94 Changes in Scholastic Performance of Year 11 Entrants 1976 and 1981-83; and
- No. 95 The Incidence and Management of ADD (alcohol and drug dependent) Students in High and District High Schools.

#### Physical Education

The Physical Education Branch provides advice and assists with both policy formation and implementation of physical education programs appropriate to the needs of pupils. This assistance includes conducting in-service programs for teachers as well as producing a wide range of curriculum guidelines and resource materials in the areas of dance, health, aquatics, gymnastics, games, athletics and outdoor education.

The Branch also evaluates facilities and equipment required to implement a comprehensive physical education program. This includes development of safety guidelines for the design and layout of playgrounds, swimming pools and achievement tracks.

In 1982, and previous years, the Branch was responsible for administering the State Learn-to-Swim Campaign, as well as school and community aquatic programs in the Education Department pools at Hobart, Launceston and Ulverstone.

# Outdoor and Environmental Education

Education Department outdoor education and environment centres provide education, leisure, and recreation programs in a variety of environments. Children attend these centres on a daily or residential basis at the following places:

Hagley Farm Environment Centre is located 25km west of Launceston on the Bass Highway. Programs are based on a 62 hectare farm owned by the Education Department. The Centre caters for live-in or day visit groups from primary schools and offers three broad areas - natural science, social science and physical education.

Molesworth Day-Visit Environment Centre is located 36km north of Hobart in a hop growing region. It provides a base for field explorations through bushland, hopfields and farming areas. The daily programs are integrated into aspects of the curriculum such as mathematics, micro-studies, orienteering, land use, survival and language development.

Sprent School Farm and Environment Centre is located 20km south of Ulverstone and caters for live-in and day groups. Programs are based on a 12 hectare school farm and the surrounding environment.

Waddamana Field Studies Centre is located in the Central Highlands 140km from Hobart. The centre caters for live-in groups and offers educational, recreational and leisure programs based on the local flora, geology and power station.

Woodbridge Marine Studies Centre is located 40km south of Hobart and provides a base for practical marine studies for groups of primary and secondary pupils. Facilities include a laboratory, aquarium, research vessel and small craft. Activities cover a comprehensive range of topics including oceanography, marine biology, navigation and commercial fishing.

# Division of Recreation

In response to the establishment of a Commonwealth Department of Tourism and Recreation and the need for governments to play a more significant role in the provision of leisure opportunities, the Tasmanian Government formed a Division of Recreation as a branch of the Education Department in 1974-75. It was formed to assume prime responsibilities for recreation and compliment the work of existing State departments and agencies. The Division has the responsibility of promoting the physical and social well-being of all sections of the Tasmanian community through policies enhancing motivation, opportunity, support, co-ordination and co-operation rather than control direct.

Division offices are located throughout the State at Hobart, Launceston, Burnie, Devonport, Ulverstone, Smithton and Queenstown. Regional recreational officers provide advice and support to local community groups and agencies.

The Division also has officers with statewide responsibilities for disadvantaged groups, camping, outdoor recreation, research and planning, outdoor education, water safety and sports development. Facilities and equipment are also available for use by community recreation groups. They also ensure that leisure opportunities are planned to provide for equitable and rational distribution of resources which are in accord with community needs.

Co-operation with government and non-government agencies involved with recreation ensures that a variety of recreation and sporting facilities are available to cater for community, regional, State or national needs. This promotes a balance in emphasis between active organised group demands and informal recreation provision.

The Division also supports the development of recreation programs and assists with sports coaching schemes through the provision of information and advice on sources of finance for projects and assessing the merits of applications for programs or capital works grants.

During 1983, the Government's water safety program became the responsibility of the Division of Recreation with the appointment of a State co-ordinator and the

establishment of a Water Safety Committee made up of representatives of relevant government departments and community organisations.

Under the International Standard Sports Facilities Program, a velodrome, at the Kate Reed State Recreation Area, Launceston, a baseball centre at Kingborough, and a rowing course at Lake Barrington were built.

In 1983, the computerised Directory of Recreation Organisations which lists over two thousand clubs was promoted throughout Tasmanian schools as a leisure education resource.

A new edition of 'A Child is not a little Adult: Modified Approaches to Sport for Australian Children' was released and it has received wide acclaim from sporting, educational and community groups alike.

#### TERTIARY EDUCATION

# University of Tasmania

# Founding

The University of Tasmania was founded in 1890 and was the fourth university to be established in Australia. When teaching began in 1893 with three lecturers and six students, it occupied 1.6 hectares of land on the Queen's Domain at Hobart.

#### Residential Colleges

There are three residential colleges in the University. Christ College, affiliated with the University in 1933, was moved to new premises on the University campus at Sandy Bay in 1962 and provides accommodation in single study-bedrooms for 144 male and female students, eight tutors and a deputy warden. St John Fisher College, opened in 1962, accommodates 96 students in single study-bedrooms and is under the direction of the Catholic Church. Jane Franklin Hall was founded by the Tasmanian Council of Churches in 1950 as a hall of residence for women students. The Hall now provides accommodation for 160 male and female students.

#### Buildings

The University site at Sandy Bay was chosen in 1944. Until 1957 temporary huts were used extensively, mainly by the rapidly growing science departments. In 1957 the first permanent building was erected and by 1973 all departments of the then eight faculties were housed in permanent buildings.

Since that date the new buildings completed are: a computer centre; a child care centre; a cosmic ray observatory; a sports and recreation centre; and the University Centre which consists of a complex of lecture theatres (which can be combined to form a single 800-seat hall), a fine arts gallery and a classics museum. A major extension to the Arts-Commerce-Education building has been completed as well as a further extension to the Union building. A drama studio was completed during 1981. Hytten Hall, a former student residence was converted to house the Centre for Education.

# Academic Developments

Since 1958, the main academic developments have been the establishment of two new faculties, Agricultural Science and Medicine, and the inclusion, in 1978, of the School of Pharmacy in the Faculty of Medicine and the School of Surveying in the Faculty of Engineering.

#### Finance

From 1974 the Commonwealth Government assumed full responsibility for tertiary education. Tuition fees were abolished as from 1974 and an assistance scheme was introduced to assist full-time students, subject to a means test.

The following table shows the income and expenditure of the University of Tasmania for recent years:

# University of Tasmania: Income and Expenditure (\$'000)

	(2,000)			
Particulars	1980	1981	1982	1983
	Income			
Recurrent purposes—				
Commonwealth Government	20 991	27 341	30 900	33 268
Other	303	505	584	635
Total	21 294	27 846	31 484	33 903
Equipment grants—				
Commonwealth Government	635	724	930	960
Other	1	_	1	1
Total	636	724	931	961
Other purposes—				
Halls of residence	243	_	_	
Prizes, scholarships and	273			
benefactions	283	1 051	1 326	918
Research grants	991	1 163	1 485	1 676
Other	1 013	2 177	2 704	2 918
Total	2 530	4 391	5 515	5 512
Total income	24 460	32 961	37 930	40 376
	Expenditur	e		
<b>D</b>				
Academic activites (incl.				
research)	13 944	18 353	21 709	20 739
Academic services	2 421	3 038	3 510	3 603
Student and staff services	390	476	578	604
General university services	4 547	5 767	7 100	7 046
Other	261	326	96	89
Total	21 563	27 960	32 993	32 081
Equipment counts	<del> </del>			
Academic activites (incl.				
research)	321	384	446	505
Academic services	292	366	325	415
General university services	37	73	56	78
Total	650	823	827	998
		,		
Other purposes—	272			
Halls of residence	273	w/ w// feet	_	_
Prizes, scholarships and benefactions	100	358	625	1 335
Research grants	198 985	1 146	625 1 385	1 432
Other	1 012	2 839	1 763	2 019
Total	2 468	4 343	3 773	4 786
Total expenditure	24 681	33 126	37 593	37 865

# Government of the University

The governing body of the University is the Council, comprising the Chancellor, the Vice-Chancellor, the Pro-Vice-Chancellor, the Chairman of the Professorial Board, the Director-General of Education, and the President of the Students' Union all of whom are

ex-officio members. There are 24 Council members who are elected or appointed by the teaching staff, graduates, undergraduates, the two houses of Tasmanian Parliament, the Governor and members appointed by the Governor on the recommendation of the Council. The Council is presided over by the Chancellor.

The Professorial Board is the senior body on academic matters. The Vice-Chancellor is the chief academic and executive officer. Reporting to the Board are the faculties and teaching departments.

Graduates are represented in University affairs through membership of Convocation and through it they elect four members to the Council.

# Staff and Students

The following table shows the number of teaching staff and students:

University of Tasmania: Academic Staff and Students Enrolled at 30 April (a)

Particulars	1979	1980	1981	1982	1983	1984
Academic staff—		-				
Professors	38	37	39	36	28	29
Other	263.0	263.8	334.4	335.9	330.8	330.0
Total academic staff	301.0	300.8	373.4	371.9	358.8	359.0
Individual students enrolled	3 435	3 517	5 082	5 210	5 229	5 383

<sup>(</sup>a) Full-time equivalent.

The next table shows student enrolment by course:

University of Tasmania: Enrolments 1984

	Students enrolled						
Course	New	Total	oril				
	enrolments (a)	Males	Females	Total			
Master and Doctor degrees	224	444	202	646			
Bachelor degree-							
Agricultural Science	17	33	19	52			
Fine Art	69	85	98	183			
Arts	420	371	518	889			
Commerce	163	272	101	373			
Economics	74	114	40	154			
Education	209	148	450	598			
Engineering	74	237	11	248			
Surveying	14	41	2	43			
Law (b)	81	117	55	172			
Medicine (c)	53	163	130	293			
Music	24	30	49	79			
Pharmacy	20	28	23	51			
Science	207	432	134	566			
Combined B.A./LL.B	27	57	26	83			
Combined B. Ec/LL.B	6	9	4	13			
Combined B.Com./LL.B	9	9	3	12			
Combined B.Sc/LL.B	3	4	2	6			
Combined B.E./BSc	5	6		6			
Total	1 475	2 156	1 665	3 821			

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# University of Tasmania: Enrolments 1984-continued

	Students enrolled					
Course	New	Total enrolments at 30 April				
	enrolments (a)	Males	Females	Total		
Honours and post-graduate bachelor  Non-degree courses—  Sub-graduate and post-	30	92	48	140		
graduate diplomaOther (d)	303 264	168 149	256 208	424 357		
Total	597	409	512	921		
Total all courses	2 296	3 009	2 379	5 388		

- (a) New enrolments refer to those students who either commenced studies for higher degrees or, being undergraduates, enrolled at the University of Tasmania for the first time in 1984, or transferred from one faculty to another.
- (b) Since 1975, students must complete one year in another faculty before starting law.
- (c) Students may enrol for an honours degree in Medical Science after completing at least three years of M.B., B.S. course.
- (d) Of students classified as 'other' 42 students were enrolled for a master degree qualifying examination. The remainder were enrolled for university subjects but were not proceeding to either a degree or diploma.

#### Degrees Conferred

The following table shows degrees conferred:

University of Tasmania: Degrees Conferred (a) During Year Ended 30 June

Degree		1982	1983	1984						
Higher Degrees										
Higher Doctor	Males			1						
	Females	_		_						
Doctor of Philosophy	Males	18	17	19						
	Females	4	3	1						
Master	Males	16	41	55						
	Females	4	36	19						
Bachelor De	grees (b)	1982	1983	1984						
Agricultural Science	Males	3	5	9						
_	Females	3	ì	_						
Fine Art	Males	7	14	10						
	Females	11	10	20						
Arts (c)	Males	71	75	80						
	Females	104	128	109						
Commerce (c)	Males	31	35	37						
	Females	8	16	17						
Economics (c)	Males	18	21	23						
	Females	4	7	11						
Education	Males	32	35	13						
	Females	95	105	75						
Special Education	Males	1								
	Females	1	1	1						
Engineering	Males	22	17	31						
	Females	_	_	1						
Law	Males	27	27	20						
	Females	7	11	12						

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#### TERTIARY EDUCATION

University of Tasmania:	Degrees Conferred	l (a) During Year	Ended 30 June—continued

Degree		1982	1983	1984					
Bachelor Degrees (b)									
Medical Science	Males	36	17	26					
Wiedreal Science	Females	15	22	16					
Medicine/Surgery	Males	27	31	30					
	Females	10	13	11					
Music	Males	7	1	5					
	Females	7	6	13					
Pharmacy	Males	16	6	5					
	Females	7	8	11					
Science	Males	96	91	113					
	Females	40	39	46					
Surveying	Males	3	4	15					
	Females								
Total bachelor	Males	397	379	417					
degrees	Females	312	367	343					
	Persons	709	746	760					

<sup>(</sup>a) Excludes honorary degrees.

#### Advanced Education in Tasmania

#### Concept

Until the late 1960s higher education in Australia had been provided by universities. Some professional courses were also provided by other institutions. In Tasmania, technical colleges, in addition to playing their main role in providing apprentice training, trade courses and adult education etc, also provided courses of a professional nature. The development of colleges of advanced education allowed both a re-organisation and a rationalisation of tertiary education in Australia.

In general terms, colleges of advanced education provide higher education and training with a vocational and applied emphasis. Degree and diploma courses have been developed in a wide range of discipline areas to meet identified community demands.

#### History

Following a national seminar on planning for colleges of advanced education held in Hobart towards the end of 1967, the educational specifications and a master plan for the Mt Nelson Campus were prepared. In June 1969 the contract for the Resource Materials Centre (Stage 1) of the project was let. Appointment of staff to the College commenced in 1971 and during 1972 the first on-site lectures were held at Mt Nelson. In 1973 a campus of the College was established at Newnham (a suburb of Launceston).

The College has recently undergone significant changes as a result of the rationalisation of tertiary education in Tasmania. This rationalisation began with the Committee on Post-Secondary Education appointed jointly by the Commonwealth and State Governments in April 1975 which recommended major changes in the structure of the College. The proposals included widening the range of courses at the University in Hobart and establishing the Newnham campus of the College as the centre of advanced education in the north of the State. In February 1980 the Tasmanian Government

<sup>(</sup>b) Includes bachelor degrees with honours.

<sup>(</sup>c) Includes combined Law degrees.

accepted the recommendations of the Tertiary Education Commission of Tasmania on the future training of teachers in Southern Tasmania. As a result the Schools of Teacher Education, Art, Music and Librarianship were transferred to the University from 1 January 1981.

This rationalisation, which resulted in the closure of the Mt Nelson campus, is in keeping with the Tasmanian Government's policy to achieve a balanced development of the three sectors of tertiary education on a geographic basis.

#### Advanced Education Council

The Advanced Education Act 1968 established the Tasmanian Council of Advanced Education. An amendment to this Act now provides for the appointment of 17 members of whom one shall be the person holding the office of the Principal; two shall be officers of the Advanced Education Service (other than the Principal); and two shall be persons undertaking a course of advanced education.

## The College Today

The Tasmanian College of Advanced Education is a multi-disciplinary higher education college centred in the Launceston suburb of Newnham. As well as offering full-time and part-time courses at its home campus, the College has also developed a program of external and mixed mode studies to assist students statewide who cannot attend classes in Launceston.

Since 1984, the activities of the College have been carried out within four academic divisions:

- Administrative Studies formed by the School of Business;
- Arts and Sciences consisting of the Schools of Applied Science, General Studies, Nursing and Social Work;
- Environmental Design consisting of the Schools of Architecture, Planning and Landscape Architecture, Engineering and Art; and
- Education formed by the School of Teacher Education.

The College has also established a Centre for Legal Practice within the School of Business, a Centre for Drama and a Centre for Music within the School of General Studies, and a Centre for Physical Education within the School of Teacher Education.

The Divisions are supported by an extensive Library, and modern Computer Centre, as well as Audio-Visual Production, Student Counselling and External Studies Units.

#### Students and Courses

The next table shows total enrolments for a three-year period:

# College of Advanced Education: Enrolments, Tasmania (Number)

Description		1981		1982			1983		
	Males	Females	Persons	Males	Females	Persons	Males	Females	Persons
Full-time	374	583	957	378	551	929	462	580	1 042
Part-time	661	464	1 125	740	511	1 251	854	638	1 492
Total	1 035	1 047	2 082	1 118	1 062	2 180	1 316	1 218	2 534

Awards are made at four levels; bachelor degree, diploma, graduate diploma and master's degree. The following table shows the number of students enrolled by course in 1983:

College of Advanced Education: Enrolments by Course, Tasmania, 30 April 1983 (Number)

Course	Males	Females	Persons
Master of Education	14	8	22
Legal Practice Course	22	8	30
Grad. Dip. in Professional Management	43	8	51
Grad. Dip. in Special Education	4	13	17
Grad. Dip. in Art	4	2	6
Grad. Dip. in Architecture	24	3	27
Grad. Dip. in Landscape Planning	4	3	7
Grad. Dip. in Urban Planning	12	1	13
Bachelor of Business (Personnel Management and	12	-	••
Industrial Relations)	43	15	58
Bachelor of Business (Business Administration)	43	8	51
	167	69	236
Bachelor of Business (Accounting)		5	230
Bachelor of Business (Public Administration)	18	3	23
Bachelor of Business (Accounting and Data	40	0	40
Processing)	40	8	48
Bachelor of Business (Data Processing)	13	2	15
Bachelor of Applied Science (Nursing)	8	81	89
Bachelor of Applied Science (Applied Chemistry)	13	3	16
Bachelor of Applied Science (Medical Technology)	25	24	49
Bachelor of Applied Science (Multi Disciplinary)	23	12	35
Engineering Feeder Course	15	1	16
Bachelor of Education	145	367	512
Bachelor of Education — In Service	99	179	278
Bachelor of Arts in General Studies	30	45	75
Bachelor of Arts in Social Work	22	60	82
Bachelor of Arts in Environmental Design	54	17	71
Diploma of Teaching in TAFE	120	34	154
Diploma of Personnel Management & Industrial	120	•	
Relations	10	2	12
Diploma of Creative Arts	3	6	. 9
	3	29	32
Diploma of Applied Science (Nursing)	6	24	30
Diploma of Arts in Consol Studies	12	20	32
Diploma of Arts in General Studies	70	9	79
Associate Diploma in Computing	70	9	19
Associate Diploma in Agricultural Business	111	27	148
Management	111	37	12
Associate Diploma in Applied Science (Aquaculture)	9	3	12
Associate Diploma in Social Welfare	1	0	10
(Habilitation of the Handicapped)	17	9	10
Associate Diploma in Art	17	31	48
Associate Diploma in Music	5	10	15
Associate Diploma in Applied Design (Wood)	13		13
Miscellaneous Students	51	62	113
Total enrolments	1 316	1 218	2 534

# Teaching Staff

The next table shows teaching staff by full-time or part-time status:

College of Advanced Education: Teaching Staff (a) Tasmania

Description	1978	1979	1980	1981	1982	1983
Full-time	210	204	196 16	123	129	140 13
Total	248	235	212	132	138	153

<sup>(</sup>a) Teaching effort expressed as full-time equivalent units.

Finance

At the June 1973 Premiers' Conference the States accepted the Commonwealth Government's offer to assume full financial responsibility for tertiary education from 1 January 1974. (The amounts of recurrent expenditure saved by the States were deducted from their financial assistance grants.) The Commonwealth Government also announced in its 1973-74 Budget the decision to abolish tuition fees.

Prior to 1972-73 Commonwealth Government grants for colleges of advanced education and for teachers' colleges were provided under separate programs, but since then they have both been absorbed into a wider program of grants for advanced education.

# COMMONWEALTH GOVERNMENT ACTIVITIES IN EDUCATION

#### Introduction

Under the federal system of government in Australia, the six States and the Northern Territory are responsible for providing education services for their own residents. The Australian Government is responsible for education in the Australian Capital Territory and a few small external territories.

In recent years the Commonwealth Government has provided the State governments with substantial financial assistance specifically for schools, universities, colleges of advanced education and colleges of technical and further education. In addition, the Commonwealth Government has administered Australia-wide schemes of financial assistance for students for many years.

The Commonwealth Government first became directly involved in education when it established an Office of Education in 1945 and a branch was opened in Hobart. However, education remained a State responsibility—the principal functions of the Commonwealth Government's Hobart office were migrant education and administration of Commonwealth Government university scholarships. In 1951 the Hobart office was closed and its functions were transferred to the Tasmanian Department of Education which acted as an agent for the Commonwealth Government. With increased financial involvement in education the Hobart Office was re-opened in 1964. However, education was still primarily a State responsibility.

The portfolio of the Federal Minister for Education and Youth Affairs is composed of the Department of Education and Youth Affairs, the Commonwealth Tertiary Education Commission (assisted by the Universities Council, the Advanced Education Council and the Technical and Further Education Council), the Commonwealth Schools Commission, and the Australian Capital Territory Schools Authority. The Office of Child Care, which advises the Government on support for child care and pre-school education programs, is located within the Department of Social Security.

The Australian Constitution empowers the Commonwealth Government to make special-purpose grants to the States and to place conditions upon such grants. This power has been used to provide financial assistance to the States specifically for educational purposes. There are two national education commissions which advise the Commonwealth Government on the needs of educational institutions throughout Australia for the purposes of financial assistance: the Commonwealth Schools Commission, which was established in 1973, and the Commonwealth Tertiary Education Commission, which was established in 1977 to replace three former commissions—the Universities Commission; the Commission on Advanced Education and the Technical and Further Education Commission.

Generally, the Commissions are required to consult with State authorities (and, in the case of the Commonwealth Schools Commission, with the authorities conducting non-government schools) and such other persons, bodies and authorities as they think necessary before making recommendations to the Commonwealth Government on the amount of financial assistance required, both in general and for specific purposes, to meet the needs of each sector.

# Department of Education and Youth Affairs

The Department provides advice to the Federal Minister for Education and Youth Affairs on general educational and youth affairs policy measures and the development and investigation of educational policy proposals in new areas. It is involved in the planning and evaluation of the effective use of resources in Australian education and co-ordinates programs of advisory commissions and committees.

The Department is responsible for international relations in education; for example for co-ordinating Australian participation in the educational activities of UNESCO and OECD. It administers schemes of assistance for Australian students and also exchange programs which enable Australians to study overseas and overseas students and educationists to visit Australia. The Department is also responsible for the production of language teaching materials, provides advice on Aboriginal education and provides administrative assistance for a number of advisory committees, and the Australian Council on Awards in Advanced Education.

The Department also provides the secretariat for the Commonwealth Institutions Accreditation Committee for Advanced Education. This Committee co-operates with the Australian Council on Awards in Advanced Education and course accrediting authorities in the States and the Northern Territory to promote consistency in academic awards in colleges of advanced education throughout Australia.

Commonwealth Government Assistance for Tertiary and Secondary Students

The next table shows the number of students in Tasmania who received Commonwealth Government assistance under the various schemes for recent years:

Scheme	1979	1980	1981	1982	1983	1984
Tertiary education assistance	1 455	1 542	1 569	1 925	2 049	2 181
Adult secondary	57	45	36	35	52	46
Secondary allowances	366	402	421	432	861	986
Post-graduate	44	40	54	65	72	74
Aboriginal secondary	292	306	381	455	513	595
Aboriginal study	30	49	42	55	67	78
Isolated children	568	469	470	522	613	558
Total	2 812	2 853	2 973	3 489	4 227	4 518

Number of Students in Tasmania Receiving Commonwealth Government Assistance at 30 June

Brief descriptions of the various schemes are given below:

Tertiary Education Assistance Scheme: This scheme provides means-tested (non-competitive) allowances to full-time, unbonded students attending approved courses at tertiary institutions. Benefits in 1985 include an allowance, subject to a means test, of up to \$2 321 per year for students living at home; and up to \$3 581 per year for students living away from home and for independent students. Dependants' allowances of \$42.70 per week for a dependent spouse and \$14.00 per week for each dependent child are payable. Also provided are allowances to assist with student union and other incidental fees. The following incidentals allowances are payable in 1985: for students enrolled at universities, \$100; for students at colleges of advanced education, \$70; and for students at technical colleges, \$30.

Adult Secondary Education Assistance Scheme: Assistance is available under this scheme for students, aged 19 years or more on 1 January of the year of study, who have had a break from secondary studies and who have returned to undertake full-time or one year matriculation level program or a two year program (if studies beyond Year 10 in the Australian secondary school system have not previously been undertaken) full-time at secondary schools, technical colleges and other approved institutions. In 1985 the maximum allowance for students living at home was \$2 321 per year and up to \$3 581 per year for students living away from home and for independent students.

Secondary Allowances Scheme: Families with limited financial resources are assisted under this scheme to maintain their children at school for the final two years of secondary education. For 1985 an allowance of up to \$1 202 per year was provided on a noncompetitive basis subject to family income.

Post-graduate Awards: Awards are made annually to enable students to undertake post-graduate studies at an Australian university or college of advanced education. In Tasmania, in 1984, 29 new awards were made available. Selection is made on the basis of ranking by each institution and in the case of course awards and advanced education institutions awards, the final order of merit list is drawn up by a Central Selection Committee. The award, subject to annual renewal, may be held for a maximum of four years in the case of a doctorate degree candidate or two years in the case of a master's candidate. In 1985 award holders receive a living allowance of \$7 616 per year. Provision is also made for assistance with travel, establishment and thesis costs and married award holders may qualify for an allowance in respect of dependants (spouse and children). Allowances are taxable. In 1985 post-graduate students are able to earn \$1 000 from an award provided by a tertiary institution or \$5 000 from a private sector award.

Aboriginal Grants Schemes: The Department of Education administers two schemes of assistance for students of Aboriginal descent—the Aboriginal Study Grants Scheme and the Aboriginal Secondary Grants Scheme. Aboriginal study grants assist Aboriginals and Torres Strait Islanders to undertake training and study after leaving school and provide the full-time student with fees and a living allowance. In 1985 married students or students 18 and over receive \$78.96 per week, while unmarried students under 18 receive \$65.46 per week. Other special allowances such as establishment and textbook allowances, are also payable, including some benefits to part-time students. The Aboriginal Secondary Grants Scheme provides assistance to Aboriginal or Torres Strait Islander secondary school students to encourage them to obtain a secondary education. The Scheme provides a living allowance which, in 1985, is \$418 per year for students in junior grades and \$597 for senior students. Allowances are also payable for the cost of board (in approved cases) school books and clothing, uniforms, fares, fees and other items.

Assistance for Isolated Children: This scheme provides financial assistance to enable children living in isolated areas to have access to schooling in the appropriate grade or year. In 1985, boarding allowances of up to \$2 148 a year are payable for a primary pupil, up to \$2 672 a year for a senior secondary student and up to \$2 371 a year for other secondary students including a basic \$927 free of means test. Where a family, in preference to boarding its children away from home, maintained a second home to enable the children to attend school on a daily basis, a second home allowance of between \$927 and \$2 364 per year is paid, depending on the number of children involved. For children who studied by correspondence, an allowance of up to \$500 per child per year is payable.

National Aboriginal Education Committee: This Committee was established in March 1977 to advise the Commonwealth Minister for Education and his Department on the educational needs of Aboriginal people and the most appropriate ways of meeting these needs. The National Aboriginal Education Committee is an all-Aboriginal committee of 19 members who come from all States, including Tasmania as well as the Torres Strait Islands.

# Participation and Equity Program

In July 1983 the Government announced the establishment of a new Participation and Equity Program to commence in 1984. The new program which subsumes the Transition From School To Work Program has the objectives of encouraging all young persons to participate in education, and of ensuring, as far as practicable, more equal outcomes of education for all young people.

In 1984, \$2.7 million was allocated to Tasmania of which \$326 000 was for Government schools, \$103 000 for non-government schools and \$1.2 million for TAFE.

# **Adult Migrant Education Program**

The Department of Immigration and Ethnic Affairs, in association with the Adult Migrant Education Service of the Tasmanian Division of Further Education, offers statewide opportunities for free English language training. Education services commenced in 1947 and since 1951 the program has been funded by the Commonwealth Government and administered by the State authorities.

The education program offers learning opportunities for both newly-arrived migrants and refugees and for those who have been in Australia for longer than a year. During their first year of residency the students attend courses covering orientation to the Australian Community. A living-allowance may be payable to students attending On-Arrival or full-time On-Going Courses.

The English classes are held during the day and in the evening at different locations throughout the State. The AME Service at 81 Murray Street, Hobart has an excellent library/self-access centre from which books and materials are distributed. Special courses directed to work-related language needs are organised through the Service. Volunteer tutors visit homes under the Home Tutor Scheme. Distance learning lessons are also available.

The level of the courses, length of time over which a course is offered and the appropriate education arrangements depend on language learning needs of the client group, their personal circumstances and educational background. The Education Section of each Regional Office of the Department of Immigration and Ethnic Affairs is responsible for making arrangements with State Adult Migrant Education authorities to provide the best possible learning opportunities for people in various locations.

During the 1983-84 financial year 69 students were enrolled in full-time English courses in Hobart, Launceston and Burnie; 819 in part-time day and evening courses and 26 in distance learning courses. The Home Tutor Scheme using 112 volunteer tutors teaching English on a one-to-one basis, usually in the migrants' homes, attracted 124 new students throughout the year. The self-access centre attracted 46 students during the year.

## International Youth Year

The United Nations has designated 1985 as the International Youth Year (IYY). In Australia the Department of Education and Youth Affairs is taking the co-ordinating role for the IYY. A secretariat has been set up in the Office of Youth Affairs.

The themes set by the UN are participation, development and peace. These call for:

- recognition of young people's ability and judgement;
- encouragement of the participation of young people in national achievement and development;
- enhancing the capacity of young people to better their lives and realise their full potential; and
- ensuring that young people are allowed to grow up in an environment of respect, understanding and equality.

The aims of IYY in Australia are to:

- increase awareness of the situation of young people by decision makers and the public;
- promote policies and programs affecting youth;
- increase participation of young people and youth organisations in society; and
- encourage young people to have the ideals of peace, mutual respect and understanding.

# Children's Services

The Commonwealth Government, through the medium of the Children's Services Program, provides grants to State and local governments and community organisations for the development of services which will enhance the care and development of children and which will support their families.

In Australia the basic responsibility for the regulation, licensing and provision of family and child welfare and early childhood education services lies with the States.

The Commonwealth's intention is to encourage the development of a flexible network of innovative projects in the children's and family service area which complement the activities of State governments and which are directed at groups in the community most in need, including migrant, socially and economically deprived, isolated, aboriginal and handicapped children.

Types of services funded are day care centres, family day care schemes, play group associations, after school and vacation care, occasional and emergency care, and family support. The latter is administered jointly with the State Government.

# The Commonwealth Schools Commission

The Schools Commission was created by the Commonwealth Government as a statutory body under the Schools Commission Act 1973. The Commission was preceded by the Interim Committee for the Australian Schools Commission, chaired by Professor Peter Karmel. The Interim Committee reported to the Commonwealth Government in May 1973 in a Report entitled Schools in Australia, the major recommendations of which were accepted by the Government. As a result of this Report, funding for Australian schools for 1974 and 1975 was made available by the Federal Parliament which enacted the States Grants (Schools) Act 1973. Other Commonwealth Government funds continued to be available under the States Grants (Schools) Act 1972. Supplementary grants were made in subsequent amendments to both Acts. Since 1976 yearly allocations have been made under the various State Grants (Schools Assistance) Acts.

In broad terms, the functions of the Commission are:

• to report to the Federal Minister of Education, after consultation with interested parties, on the needs of primary and secondary schools and on the priorities that should be given to satisfying those needs;

to inquire into and report on important aspects of primary and secondary schooling, with a view to improving the quality of education and the

efficient use of resources; and

• to carry out, in conjunction with various schools and school systems, studies aimed at finding solutions to educational problems.

# State Planning and Finance Committee

The functions of the State Planning and Finance Committee are to:

- supervise the distribution to non-government schools of Commonwealth
  Government grants within the State and in particular to recommend
  subsidy levels for non-systemic schools and report regularly to the
  Commonwealth Schools Commission on the application of the needs
  principle in the distribution of block subsidy grants for Catholic systemic schools;
- establish priorities based on need and make recommendations on applications for building grants from non-government schools;
- recommend non-systemic non-government schools seeking to be declared as disadvantaged for the purposes of the Disadvantaged Schools Program;
- examine claims and make recommendations upon applications from nongovernment schools for short term emergency assistance; and
- advise the Commission on matters affecting the formation and development
  of non-government schools, and on other matters as referred by the
  Commission from time to time.

Members are appointed by the Commonwealth Minister for Education with the aim of achieving a broadly representative committee competent to make decisions on priorities and levels of funding in respect of individual schools.

# Financial Allocation

The following table shows the program allocations for 1984:

# Commonwealth Schools Commission Programs (a) 1984 (\$'000)

Program	Tasmania	All States
Government schools—	•	
General recurrent	9 720	315 567
Participation and equity	1 283	40 193
Computer education	239	4 987
English as a second language—		.,,,,
General	504	40 324
New arrivals	_	9 632
Disadvantaged schools	715	28 525
Special education—	,10	20 323
General	600	19 481
Integration	42	1 348
Capital	4 409	152 356
Capital	4 +02	132 330
Total	17 512	612 413
Non-government schools—		
General recurrent	13 355	595 221
Participation and equity	100	4 633
Computer education	71	1 247
Emergency assistance	_	611
English as a second language—		011
General	150	(b) 17 498
New arrivals		1 049
Disadvantaged schools	76	5 540
Special education—		
General	41	4 981
Integration	8	386
Capital	1 292	52 030
Total	15 093	683 196
Joint programs—		
Multicultural education	122	4 724
Ethnic schools		3 100
Country areas	340	9 714
Residential institutions	62	2 174
Severely handicapped	104	3 550
Professional development	273	10 733
Education centres		2 273
Projects of national significance		1 727
Participation and equity		520
Total	901	38 515
Total all programs	33 506	1 334 124

<sup>(</sup>a) Estimated December 1983 prices.

#### Programs for 1984

The Commission operated 14 main programs during the year. The programs and Tasmania's share of the funds are summarised overleaf:

<sup>(</sup>b) Includes \$701 000 for non-government non-Catholic schools.

General Recurrent Grants Program: In 1984 \$838 million was allocated nationally to cover staffing and other running costs including teaching materials and property maintenance. In Tasmania, government schools were allocated \$9.7 million and non-government schools an estimated \$11 million, based on existing funding levels.

The levels of assistance to which a non-government school may be entitled are shown in the following table. (In the case of Catholic and Seventh-Day Adventist Systemic schools a block subsidy grant at one of these levels is given to cover all schools in the system.) In 1982 the six funding levels that applied previously were compressed into three funding groups in the following manner. Basically, levels 1-3 became Group 1, levels 4-5 became Group 2 and level 6 became Group 3.

General Recurrent Per Student Grants for Non-Government Schools, 1984

Subsidy group (a)	Subsidy group (a) Primary \$	
la	270	428
lb	360	571
2	545	866
3	741	1 177

(a) Sub-group 1a consists of 41 schools which the government has decided will have per student grants reduced by 25 per cent in 1984. Sub-group 1b consists of all other Group 1 schools.

New non-government, non-systemic schools receive supplementary establishment grants for the first four years of their operation to assist with the special costs which accompany the development of a new school. These establishment grants are calculated on a per student basis, being 10 per cent, 7.5 per cent, 5 per cent and 2.5 per cent of average government school standard costs respectively for each of the first four years of a non-systemic school's existence. The table shows the per student value of these grants in 1984.

Establishment Grants Per Student for New Non-Government, Non-Systemic Schools, 1984

Year of commencement	Percentage of government standard cost	Primary	Secondary
	%	\$	\$
1984	10.0	180	286
1983	7.5	135	214
1982	5.0	90	143
1981	2.5	45	71

Participation and Equity Program. This new program introduced in 1984 has two main aims: to encourage young people to participate in education or training at schools or technical and further education institutions until they have completed a full secondary education; and to ensure that the education and training provided offers equal opportunities to develop individual talents and abilities. An amount of \$44.8 million was allocated nationally for schools, with a further \$520 000 available for national-level projects. The allocation for Tasmania was \$1.4 million, with \$1.3 million going to government schools and \$100 000 to non-government schools.

Computer Education Program: This second new program introduced in 1984 aims to support a broad range of activities related to the use of computers in schools. Funds are provided for the following elements; professional development, curriculum development, software and courseware, hardware, support services and evaluation. The government has provided \$18.7 over three years to support the program. An amount of \$6.2 million was allocated nationally to concentrate initially on secondary schools. The allocation for Tasmania was \$310 000, with \$239 000 going to government schools and \$71 000 to non-government schools.

English as a Second Language Program: This program replaces the Migrant Education Program and has two distinct elements; the bulk of the funds is allocated to develop and improve competence in English of students who come from non English-speaking backgrounds. The remainder of the funds is available to education authorities for the provision of intensive English language programs for refugees and other non English-speaking students who are newly arrived in Australia. In 1984 \$57.8 million was allocated nationally for the first element and \$10.7 million was allocated for the second element. The allocation for Tasmania was \$654 000, with \$504 000 going to government schools and \$150 000 to non-government schools for use under the first element.

Disadvantaged Schools Program: In 1984 \$34.1 million was allocated nationally to provide a positive discrimination in favour of those schools declared to be disadvantaged, on the basis of socio-economic background characteristics associated with lower than average school success. The allocation for Tasmania was \$791 000, with \$715 000 going to government schools and \$76 000 to non-government schools.

Special Education Program: In 1984 \$26.2 million was allocated nationally to improve the quality and coverage of educational services for handicapped children by supplementing the funding of special education of those children attending special or regular schools or by assisting the integration of handicapped children into regular schools. The allocation for Tasmania was \$691 000, with \$642 000 going to government schools and \$49 000 to non-government schools for use in both areas.

Capital Grants Program. In 1984 \$197.3 million was allocated nationally for the provision of building and related facilities up to prescribed standards. This has been divided into different elements, designed to meet specific needs for various types of educational facilities. The allocation for Tasmania was \$5.7 million, with \$4.4 million going to government schools and \$1.3 going to non-government schools.

An additional \$7.1 million was allocated nationally for Aboriginal and Torres Strait Islander Schools, mainly for upgrading and extensions and to assist with the building of new schools. \$5.1 million was available for the government and \$2.0 million for the non-government sector. Priorities are determined by a national panel selected from both sectors including members from the National Aboriginal Education Committee.

Multicultural Education Program: In 1984 \$4.3 million was allocated nationally to support community language teaching programs and the development of relevant curricula, providing small grants to school communities to implement multicultural projects, employing ethnic schools liaison officers, and funding projects concerned with Aboriginal languages and cultures. The allocation for Tasmania was \$122 000 to be used jointly in both government and non-government schools.

An additional \$378 000 was allocated for national-level projects, which was previously included as an element of the Projects of National Significance Program.

Ethnic Schools Program: In 1984 \$3.1 million was allocated nationally to approved ethnic schools authorities conducting courses in community languages through insertion classes in day schools or in afterhours schools or classes in all States. Eligibility has been extended to groups providing instruction in Aboriginal and Torres Strait Islander languages and culture, on the same basis as for existing ethnic schools authorities.

Country Areas Program: In 1984 \$9.7 million was allocated nationally to help alleviate the educational disadvantage of country children and their families, to develop better ways of delivering educational services to students in country schools and to provide a framework within which school communities and country people can work co-operatively to improve education opportunities for country children. The allocation for Tasmania was \$340 000 for joint use in both government and non-government schools.

Children in Residential Institutions Program: In 1984 \$2.1 million was allocated nationally to provide supplementary educational support to residential institutions and opportunities for broadening the general experience of the children in the outside community. The allocation for Tasmania was \$62 000 to be used in eligible institutions.

Severely Handicapped Children's Program: In 1984 \$3.6 million was allocated nationally to assist children with severe developmental disabilities to realise, through education, their potential for independence and self-esteem. This involved co-ordination of multi-disciplinary services to these children and their families; identification, refinement and sharing of appropriate resources; and improving the skills of persons who help to educate the children. The allocation for Tasmania was \$104 000 to be administered by a joint committee representing government and non-government education authorities and agencies, and interested organisations.

Professional Development Program: In 1984 \$10.7 million was allocated nationally to support professional development programs for teachers and support staff, and for activities for parents and other community members designed to assist them in school-based decision making and school improvement efforts. The allocation for Tasmania was \$273 000 for teacher development and associated activities. An additional \$2.3 million was allocated nationally for education centres which complement the thrust of the Professional Development Program.

Projects of National Significance Program: In 1984 \$1.7 million was allocated nationally to support activities such as applied research, and dissemination of ideas which the Commission regards as nationally significant. Similar activities are also supported through three other programs; Participation and Equity, Multicultural Education, and Professional Development. The Program is divided into eight specific and two general elements and allocations for each were: \$104 000 for Aboriginal Education, \$208 000 for Arts Education, \$104 000 for Choice and Diversity in Government Schools, \$156 000 for Computer Education, \$260 000 for Education of Girls, \$104 000 for Gifted and Talented Children, \$104 000 for School and Community, \$104 000 for School Evaluation, \$272 000 for General Projects and \$311 000 for Review and Evaluation of Commission Programs.

## **Commonwealth Tertiary Education Commission**

In April 1977 the Commonwealth Parliament passed legislation to establish a Tertiary Education Commission. The Commission, which commenced operation on 22 June 1977, replaced the three existing tertiary commissions — the Universities Commission, the Commission on Advanced Education, and the Technical and Further Education Commission.

The role of the Commonwealth Tertiary Education Commission is to develop and recommend policies for Commonwealth financial support to the States across the range of post-secondary institutions. Under its Act, the Commission is required to perform its functions with the object of promoting the balanced and co-ordinated development of the provision of tertiary education in Australia and the diversification of opportunities for tertiary education. The Commission is assisted in its work by three statutory Councils concerned with universities, advanced education, and technical and further education.

# Financing of Tertiary Education

Commonwealth Government assistance to the States for universities dated from 1951-52. Grants for colleges of advanced education were made from the beginning of the 1967-69 triennium. Broadly speaking, these grants were provided on a matching basis (joint Commonwealth and State expenditure). The Commonwealth Government first became involved in the provision of grants for technical and further education in 1964 when a scheme of unmatched capital grants to the States was introduced.

Since 1974 the Commonwealth has, with the agreement of the States, accepted full responsibility for financial assistance to universities and colleges of advanced education. Following the establishment of the Commonwealth Tertiary Education Commission,

grants for these two sectors were provided under the States Grants (Tertiary Education Assistance) Act 1977 for the year 1978, and for the triennia 1979-81 and 1982-84 under the States Grants (Tertiary Education Assistance) Acts 1978 and 1981. Generally, recurrent grants are appropriated on a triennial basis while capital and equipment grants are appropriated on an annual basis.

All Commonwealth grants for TAFE are appropriated on an annual basis and are also included in the States Grants (Tertiary Education Assistance) Acts.

The following table sets out Commonwealth Government payments to Tasmania for university education, advanced education and technical and further education for recent years:

#### Commonwealth Government Payments to Tasmania for Tertiary Education (\$'000)

Sector	1978-79	1979-80	1980-81	1981-82	1982-83	1983-84
University—						
Recurrent	18 315	20 227	24 740	30 403	32 310	35 020
Capital (a)	788	918	1 043	1 345	1 404	1 672
Advanced Education—						
Recurrent	9 436	10 068	8 739	8 323	9 459	10 367
Capital (a)	3 221	810	952	377	405	441
TAFE—						
Recurrent	1 673	2 005	2 154	2 600	3 200	3 972
Capital (a)	394	3 400	4 772	3 483	3 490	2 777

(a) Includes grants for equipment.

# STATE LIBRARY OF TASMANIA

### General

The State Library of Tasmania was created in 1943 under the *Libraries Act* 1943 from the former Tasmanian Public Library which was formed in 1849. The purpose of the State Library is to provide a comprehensive library and information service to all sections of the Tasmanian community.

#### Information Services

A primary role of the State Library is the collection and dissemination of information. From its original role as a repository of knowledge the public library has assumed the wider responsibility of collecting and making readily available a wide range of information from many sources. During the 1970s rapid developments in information retrieval using computer and communications technology applications have dramatically increased the library's ability to store and access information in response to the growing public need and demand.

As a major source of information in Tasmania the State Library was one of the first public libraries in Australia to provide on-line information access as a normal part of its reference services. In 1977 the State Library installed its first visual display unit as part of the inauguration of the AUSINET computer-based Australian information network. In 1979 a second terminal allowed on-line searching of the large array of North American data bases available on Lockheed Aircraft Corporation's DIALOG system and System Development Corporation's ORBIT.

These tools have enabled the Library to significantly improve its capacity to provide information services in science and technology. Most of the use made of DIALOG has been for government departments and agencies, and for people in business and industry who are involved in establishing new enterprises or in extending and improving existing ones.

Within Tasmania the State Library has inaugurated a computer based community information index (TICO) and co-operates widely with other community, business and government organisations. The Library's information service extends to all parts of the State through the regional framework outlined below. The State Library is also actively planning the improvement of information services to government agencies. It works closely with the libraries at the TCAE and the University of Tasmania and has extensive links with libraries on the Australian mainland and overseas.

### Lending Services

Through a regional library system comprising over 90 service points and bookmobiles the State Library provides approximately 1 000 000 lending items including books, records, cassettes, recorded books, film, audio visual kits, periodicals and other library materials. Annual loans of these items exceed 4.1 million. Prominent among the library's lending services are those to the housebound, the sight handicapped, migrant groups and young children.

# Organisation

The State Library Service is administered from its headquarters in Hobart through seven divisions within which related services and functions are grouped as follows:

# Regional Library Services

Regional services are provided by the Hobart Lending Library and six Regional Library Systems each of which is responsible for the management of all public library services within the municipalities forming its particular region.

Channel Regional Library System: This serves 29 000 people centred on Kingston from a temporary central library.

Derwent Regional Library System: Serves 68 000 people centred on Glenorchy. A new central building for the region opened in January 1979.

Hellyer Regional Library System: serves 61 000 people in the north-west and west coast from a modern central building in Burnie.

Mersey Regional Library System: serves 47 000 people in the central north coast. A new regional library headquarters opened at Devonport in 1983.

Northern Regional Library System: serves 118 000 people from a modern central library in Launceston.

Tasman Regional Library System: serves 58 000 people in eastern Tasmania from temporary premises at Bellerive. A site for a regional headquarters building has been agreed upon.

Hobart Lending Library: provides a service to over 33 000 borrowers from the head-quarters library.

Performing Arts Collection: contains over 7 000 films and approximately 60 000 records and cassette tapes. Films and records are available for borrowing by individuals and organisations.

The following table shows the distribution of branch libraries, depots, bookmobiles and books held throughout these regions and in the State Headquarters.

		Buildings		Book- mobiles	Items	Items	
Regional System	Central	Branch	Depots (a)		held ('000)	borrowed ('000)	
State Library Headquarters—	1	••		••		••	
State Reference Library					183		
Special Collections					36	_	
Reserve Collections					87	_	
Hobart Lending Library	••	.,			122	750	
Channel Region		6	_	1	74	293	
Derwent Region	1	15	1	1	129	656	
Hellyer Region	1	14		1	162	533	
Mersey Region	1	5	1	1	93	376	
Northern Region	1	23	7	2	281	1 120	
Tasman Region		9	1	1	92	440	
Total	5	72	10	7	1 259	4 168	

Public Libraries, Tasmania, 30 June 1984

(a) Comprises a small collection of materials not housed in a separate building or room.

## Reference and Information Services

State Reference Library: Coordinates information services throughout the system. Special attention is given to the needs of research workers in both the public and private sector. A large collection of directories, indexes, abstracting tools and computerised data bases are available in addition to the holdings of books, periodicals, newspapers, maps and other items.

Government Department Libraries: The State Library assists and coordinates the provision of an information service to government agencies.

Special Collections: The State Library houses unique collections of books and documents relating to Tasmania. These collections include: the Tasmanian Collection — a definitive collection of books published in Tasmania; the W.L. Crowther Library — a large research collection of books, pamphlets and other items relating to Tasmania and Australia; and the Allport Library and Museum of Fine Arts — comprising a collection of antique furniture, china, glass, silver, pictures, prints and rare books in fine editions.

Parliamentary Library: A legislative reference service is provided to both Houses in association with the Parliamentary Library Committee.

# Technical Services

This Division controls the selection, purchase and disposition of all materials throughout the system in close consultation with specialist and regional staff, and is responsible for the acquisition, cataloguing and classification of all materials added to the State Library. Extensive use is made of computer technology. Book binding and the conservation of library materials form two important activities within the Division.

# Archives Office

Under the Archives Act 1983 the Archives Office of Tasmania is the official repository for all non-current State and local government records. A considerable quantity of private records of individuals, companies, associations, societies, and institutions is also held. Public research facilities are provided.

# Central Microfilm Bureau

The Bureau provides advice on the use of microform systems and associated equipment in government departments, local government and the private sector. Services also include the production of microformats to Australian Standard Specifications.

### Management Services

This section is responsible for the provision of secretariat services for the State Library, the initiation and co-ordination of policy, research and development advice on expenditure priorities, the co-ordination of systems planning and implementation, staff development and publicity.

### Administration

The administration is responsible for advising the State Librarian and other senior officers on staffing, finance, and general administration matters.

# Expenditure

The following table shows the main expenditure items for the State Library Department for recent years:

		(\$'000)	1			
Particulars	1978-79	1979-80	1980-81	1981-82	1982-83	1983-84
Salaries and pay-roll tax Purchase of books, etc Other	3 540 893 1 211	3 896 1 046 1 279	4 572 839 1 214	5 154 914 1 299	5 531 993 1 602	6 118 1 500 1 001
Total expenditure	5 644	6 221	6 625	7 367	8 126	8 619

State Library Department Expenditure, Tasmania

## **CULTURAL ACTIVITIES**

# Tasmanian Museum and Art Gallery

# History

The Tasmanian Museum and Art Gallery has its origins in early scientific groups formed in Hobart Town in the 1820s and 1830s. In 1853 the Royal Society of Tasmania established a museum which was later vested in a Government Board of Trustees in 1885. The first building on the present site, on the corner of Argyle and Macquarie Streets, was designed by the city's best-known colonial architect, Henry Hunter (1832-1892), and completed in 1863. Later additions were made in 1889, 1901, 1966 and 1979. The income of the Museum is provided mainly by an annual grant from the State Government.

#### Activities

The Tasmanian Museum and Art Gallery houses collections in the fields of fine and applied art, zoology, geology, botany, history, anthropology and applied science. It is an integrated institution concerned with the whole range of natural and human heritage with particular emphasis on Tasmanian exhibits.

The Museum's traditional function, and still the major part of its operation today, is to collect, conserve, study and display items of cultural or scientific value to the community. It now performs a wide variety of additional roles, which include a continuing program of travelling exhibitions and a school education service which utilises the *Musbus*, a van specially equipped for transporting museum displays.

Curators, in addition to working on collections and research on related subjects, handle public inquiries which touch on their fields. Display staff are responsible for installing museum displays, publicity and museum publications. The Museum also employs experts in art conservation and taxidermy. The Tasmanian Herbarium, currently housed in the Botany Department of the University of Tasmania, is part of the Museum.

# Collections

Art: The Gallery has a comprehensive collection of Australian paintings, drawings, prints and sculpture from the early nineteenth century to the present day. The collection

places particular emphasis on art of the colonial period in Tasmania, with large groups of paintings by Glover, Duterrau, Bull, Gould, Wainewright, de Wesselow, T.E. Chapman, Louisa Anne Meredith, Skinner Prout and others. There are also some important European works of the nineteenth and early twentieth centuries by Beechey, Bouguereau, Poynter, Rodin, Epstein, Sickert and Gilman. The collection of eighteenth and nineteenth century English watercolours is one of the finest in Australia. The Gallery also collects nineteenth and twentieth century prints and photographs.

The applied arts collection includes nineteenth century European and Australian costumes, silver, china and glass and a collection of contemporary Australian ceramics and works in metals and fibres. Asian material includes a collection of jade carvings and Japanese netsuke.

History: The presentation of colonial history is highlighted by articles such as Andrew Bent's press of c. 1825 and Lady Franklin's sedan chair (c. 1840), and by a comprehensive maritime (including whaling) collection. A photograph collection covers the period from the mid-1850s to the present day. Coins and medals, including a collection of Greek, Roman and early British coins, and early time-pieces are other notable historical collections.

Anthropology: Tasmanian Aboriginal culture is represented by tools and artifacts, and rock carvings from Mount Cameron West in north-western Tasmania. There is a Melanesian collection assembled earlier this century, and representative Australian material.

Zoology: Present displays of vertebrate animals feature Tasmania's land mammals and birds, together with reptiles and marine life. Tasmanian invertebrates on show include insects, spiders, crabs, mollusc shells and sea stars. An extensive reference collection of Tasmanian animals is maintained for scientific study. The Museum safeguards many type specimens (original examples on which description of new species have been based).

Geology: Rocks, minerals and fossils of predominantly Tasmanian origin are on display. Notable exhibits include the skeletons of Wynyardia, the 20-million-year-old marsupial from Wynyard, and Zygomaturus, a giant marsupial, and the world famous mineral crocoite from Tasmania's west coast. The reference collection houses rocks and minerals, including the Petterd Mineral Collection, and fossils, which include many type specimens, mostly from Tasmania.

Botany: The Herbarium is at present housed at the University of Tasmania. It includes specimens collected early in Tasmania's history by R. C. Gunn, many of which are type specimens. Other early collectors represented include Archer, Meredith, Milligan, Stuart and Spicer. The Herbarium's current holdings number about 90 000 specimens of Tasmanian plants.

# Queen Victoria Museum and Art Gallery

The Queen Victoria Museum and Art Gallery was established by the Tasmanian Government in 1891. Since 1895 it has been vested in the Launceston Corporation and has received an annual State Government grant. It serves the northern half of Tasmania and its public galleries contain collections and exhibits of special relevance to the natural and cultural environment of Tasmania. Educational, research and information services are provided.

The Museum operates a Zeiss Medium-type Planetarium seating 66 people in a comfortable, air-conditioned auditorium beneath a celestial dome eight metres in diameter. Various sessions are conducted for the general public and for school groups. It has its own air-conditioned theatrette seating 166 people and a reference library of scientific and historical books and journals. The arms and armour collection is one of the finest in Australia and there are also extensive collections of Tasmanian animals, plants, artifacts, geological specimens, historical material, craft, decorative art and fine art.

The education office of the Queen Victoria Museum and Art Gallery provides a service to schools throughout northern Tasmania, lending a wide range of items for teaching aids and assisting with teaching programs in the public galleries. It also operates a caravan fitted out to display Museum materials which is stationed for short periods at various towns in northern and north-western Tasmania. In addition, with the assistance of the Australian National Railways Commission, it also operates a railcar fitted out to display Museum materials which will be stationed at various towns in the north and north-west of the State which are serviced by rail. Though primarily designed as teaching aids for district schools, they are also open to the general public.

The Museum's main annexe is Macquarie House in Launceston's Civic Square. The displays within Macquarie House centre on Launceston's history, through the eyes of its architecture. As well, the two annexes at Launceston's Cataract Gorge, the Band Rotunda and the Gorge Interpretation Centre, have displays emphasising the historic, recreational and cultural importance of the Gorge to the Launceston community.

In addition to the Director there are seven curatorial staff and 22 other staff members. Research is undertaken both in the field and in the institution. The results of such programs are regularly published in the Museum's own journal, *Records of the Queen Victoria Museum*, and other research publications.

# The Performing Arts

The organisation and presentation of the performing arts in Tasmania has been subject to a process of continual change. During the early 1970s, four performing arts companies were set up and subsequently funded by both Commonwealth and State Governments. They were the Tasmanian Theatre Company, Tasmanian Opera Company, Tasmanian Ballet Company and Tasmanian Puppet Theatre. However, by 1976 it was apparent that the maintenance of full-time drama, opera and dance companies in Tasmania was not feasible considering the subsidies available and the population of the island.

In 1977, the Tasmanian Theatre Company adopted an entrepreneurial role by promoting tours of Tasmania by other theatrical companies from Australia and overseas. In 1978, following the termination of the Tasmanian Opera Company and the discontinuance of Commonwealth Government grants to the Tasmanian Ballet Company, the Tasmanian Theatre Company widened its theatrical interests, to include music and dance in its presentations. From 1979, following an initiative from the Minister for the Arts, the Tasmanian Theatre Company co-ordinated and promoted a full 12-month program of drama, opera and dance in Tasmania.

In 1976 the Tasmanian Theatre Company's youth activities became a separate identity and now operates as the Salamanca Theatre Company, presenting a theatre-in-education program throughout the State. The Tasmanian Arts Council is an entrepreneurial body mainly involved in operating a touring program to schools and country areas.

In 1980, the Tasmanian Ballet Company and the Tasmanian Puppet Theatre were wound up. In their place, the new Tasmanian Dance Company presents a dance-ineducation program, the first of its kind in Australia. The Terrapin Puppet Company was formed to tour puppet presentations to schools. Until 1984, the Polygon Theatre Company presented adult and curriculum plays with Tasmanian actors.

In 1984, the Tasmanian Theatre Trust was formed to rationalise existing theatre management and with the responsibility of providing the professional subsidised theatre program in Tasmania.

Music

The Australian Broadcasting Commission maintains the Tasmanian Symphony Orchestra which is resident at the Odeon Theatre, Hobart, the only concert venue owned by the ABC in Australia. The Tasmanian Symphony Orchestra presents concert series

for adult and youth audiences, special performances for schools and accompanies visiting professional opera companies. In 1979 the Orchestra accompanied the Australian Ballet in performances in Greece and Israel. In 1984 the Orchestra was a guest of the Adelaide Festival of Arts.

Musica Viva presents a comprehensive chamber music program at the University Centre, Hobart and a smaller program in the north and north-west of the State.

A recently formed Tasmanian Chamber Orchestra is resident in Hobart.

Professional training is offered at the Conservatorium of Music. Artists in residence at the Conservatorium form the Petra String Quartet which tours Tasmania and the mainland encompassing the school, college, conservatorium and university circuits.

# Funding Bodies

Funds are made available to performing arts organisations through the Theatre, Music and Community Arts Boards of the Australia Council and through the Tasmanian Arts Advisory Board. The Tasmanian Arts Advisory Board consists of up to six members and a Chairman appointed by the Tasmanian Minister responsible for the Arts.

#### Theatres

Theatre Royal, Hobart: This theatre, which opened in 1837, is the oldest theatre in Australia. There are three levels of audience seating: stalls, dress circle with two boxes and an upper circle, with a total capacity of 743. Finance available from Commonwealth and State Governments over the last eight years enabled extensive maintenance to be done such as backstage additions, including new dressing rooms, office facilities and a new heating system. The Theatre Royal suffered severe damage from fire in June 1984 and is not expected to re-open until early 1986. The Theatre Royal is managed by the Theatre Royal Board which is appointed by the Tasmanian Government.

Princess Theatre, Launceston: This is the largest theatre in Tasmania, seating 1 072 on two levels—stalls and dress circle. It was built for live theatre in 1911, and was also used extensively as a cinema for many years. In 1970 it was purchased by the Launceston City Council and renovated as a live theatre with modern dressing rooms and facilities. Extensions and alterations since then include the installation of a full counterweight system and interior decoration. The Princess Theatre is managed by the Launceston City Council.

Civic Centre, Burnie: This is a new complex built by the Burnie Council and completed in 1976. It features an art gallery, the Town Hall and a theatre. The auditorium of the Civic Theatre seats 418 on one level.

Town Hall Theatre, Devonport: Newly converted into a raked auditorium on one level, this theatre seats 470.

#### **Further References**

ABS Publications Produced by the Tasmanian Office

Government Schools, Tasmania (4204.6), annual. Non-Government Schools, Tasmania (4205.6), annual. Tertiary Education, Tasmania (4203.6), annual.

ABS Publications Produced by the Canberra Office

National Schools Statistics Collection, Australia (4221.0), annual. Tertiary Education, Australia (4218.0), annual.

Other Publications

Annual Reports of the Education Department, Tasmania (Government Printer, Hobart).

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# Chapter 7

# SOCIAL WELFARE AND HEALTH SERVICES

#### WELFARE

#### Introduction

In Australia, the principal social welfare benefits are provided by the Commonwealth Government under the *Social Security Act* 1947, as amended, which is administered by the Commonwealth Department of Social Security. Finance for the benefits is provided from the National Welfare Fund which is augmented each year from the Consolidated Revenue Fund by an amount equal to the payments made.

State social welfare, which covers child welfare and relief, is administered by the State Department for Community Welfare.

## Commonwealth Department of Social Security

The following table shows expenditure in Tasmania from the National Welfare Fund on benefits under the Commonwealth Social Security Act:

Social Security Payments	Under	the Social	Security	Act,	Tasmania
	(\$'	(000			

(* )							
Benefit or service	1979-80	1980-81	1981-82	1982-83	1983-84		
Age and invalid pensions (a)	127 382	142 519	163 130	176 095	194 587		
Widow's pension	18 844	21 003	23 160	24 187	25 885		
Supporting parent's benefit	8 301	13 591	20 139	22 109	25 523		
Maternity allowance					********		
Family allowance	30 549	27 765	30 320	39 146	42 820		
Handicapped child's allowance	481	529	689	839	889		
Double orphan's pension	57	53	62	84	82		
Unemployment benefit	29 665	34 658	49 233	78 302	90 126		
Sickness benefit	2 299	2 901	3 595	4 618	5 221		
Special benefit	1 487	2 372	2 956	3 428	3 714		
Rehabilitation services	805	1 592	1 456	2 080	2 671		
Sheltered employment allowance .	1 064	1 386	1 731	1 942	2 207		
Funeral benefit	42	43	42	44	41		
Total	220 976	248 412	296 513	352 874	393 766		

<sup>(</sup>a) Includes wives' pension and spouse carer's pension.

In December 1984, the Prime Minister announced that a new Commonwealth Department of Community Services would be created to co-ordinate the Government's community services, and certain health and welfare policies, and to administer programs which provide or subsidise services to the aged, the disabled, children and others in special need.

The Department of Community Services will include Offices of Aged Care, Child Care and the Disabled. In addition, the responsibilities for Nursing Homes, and Home Nursing and Assistance for the Disabled, which currently rest with the Commonwealth Department of Health will be transferred to the new Department. The Commonwealth Rehabilitation Service will be in the new Department also.

The Department of Social Security will retain the responsibility for administering the payment of pensions and benefits.

# Pensions and Benefits

Social Security benefit rates which applied as the result of recent legislation are set out in the next table:

Social Security Benefits, 1984: Maximum Rates, Tasmania (\$ Per Week Unless Noted as Monthly Payments)

Benefit	May 1984 amending legislation	Nov. 1984 amending legislation
Age and invalid pensions, rehabilitation allowance and sheltered		
employment allowance—		
Single person	89.40	91.90
Single person with child (a)	97.40	115.90
Married couple (both eligible and living together), each (b)	74.55	76.65
Wife's pension	74.55	76.65
Spouse carer's pension	74.55	76.65
Widow's pensions—		
Class A (with child) (a)	97.40	115.90
Class B	89.40	91.90
Class C	89.40	91.90
Supporting parent's benefit (a)	97.40	115.90
Unemployment, sickness and special benefit—	>71.10	113.70
Single person (under 18 years)	45.00	(f)45.00
Single person (18 years and over)—	45.00	()/45.00
Sickness benefit	89.40	91.90
Others with no dependants	78.60	81.10
Others with one or more dependants (a)	89.40	91.90
Married couple (total)	149.10	153.30
Additional pension or benefit for each child (c)	12.00	14.00
Supplementary assistance (d)	10.00	15.00
Family income supplement for each child	12.00	14.00
Family allowance (monthly rate)—	12.00	14.00
One child	22.80	22.80
Two children		
Three children	55.35 94.35	55.35 94.35
For children	133.35	133.35
Each additional child	45.55	45.55
Handicapped child's allowance (monthly rate)	85.00	85.00
Double orphan's pension (monthly rate)	55.70	55.70
Funeral benefit (single lump sum payment) (e)	40.00	40.00

- (a) Includes a mother's/guardian's allowance of \$8.00 a week. November 1984 amending legislation increased this allowance to \$10.00 a week.
- (b) Where pensioner couples are living apart because of illness or infirmity, they each may be paid at the single rate.
- (c) Paid to a pensioner or beneficiary in respect of each child under 16 years and each full time student aged 16 to 24 years who is wholly or substantially dependent on that person.
- (d) Paid to pensioners, supporting parent beneficiaries and to sickness beneficiaries (who have been receiving the benefit for a continuous period of six weeks) who pay for lodgings or rent and who have little or no income apart from their pension or benefit.
- (e) If the person liable for the funeral costs is not a pensioner, the funeral benefit will be \$20.
- (f) November 1984 amending legislation provided that the single junior rate of unemployment, sickness or special benefit would be increased from \$45.00 to \$50.00 where a person had been in receipt of the benefit for six months or more.

In the previous table a description was given of the various social security pensions, benefits, etc. The rates and conditions are varied from time to time by amending legislation. Automatic indexation adjustments are made twice yearly to most pensions and benefits. The Commonwealth Treasurer outlines social security proposals in the budget and these are implemented in later Acts.

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#### **Pensions**

The following pensions are paid by the Department of Social Security: age pension, invalid pension, wife's pension, spouse carer's pension, widow's pension, supporting parent's benefit, sheltered employment allowance and rehabilitation allowance.

# Income Test

The same income test applies to all social security pensions. However, blind persons who receive an invalid pension may receive the maximum rate of pension free of the income test.

Under the income test, the maximum rate of pension is reduced by \$1 for every \$2 by which income, as assessed, exceeds the 'free' areas of \$30 per week (gross) for a single person, or \$50 per week (gross) for a married pensioner couple. If the pensioner or pensioner couple have dependent children, the allowable income may include an additional \$6 per week (gross) for each dependent child.

#### Assets Test

From March 1985, all social security pensions will be subject to an assets test. When calculating a person's rate of pension, both the existing income test and the new assets test will be applied separately. The test that produces the lower rate of pension will apply.

A pension will be affected under the assets test if the total value of assessable assets exceeds:

•	single pensioner and a home-owner	\$ 70 000
•	single pensioner and not a home-owner	\$120 000
•	married pensioner couple who own their home	\$100 000
	married pensioner couple who do not own their home	\$150 000

The principal residence plus curtilage is *not* an assessable asset.

#### Residence

All social security pensions have certain residence requirements. In most cases, a person must be living in Australia when they claim a pension, and must have lived in Australia for ten years continuously. However, there are certain exceptions, the most common of which are:

- invalid pension, where the incapacity occurred in Australia;
- widow's pension, supporting parent's benefit, where the claimant became a single parent in Australia; and
- spouse carer's pension, wife's pension, where the claimant lives with his/her spouse who is receiving an age pension or invalid pension.

### Supplementary Assistance

Supplementary assistance (or rent allowance) may be paid to pensioners who are paying rent in excess of \$10 a week, providing the claimant satisfies an income test. Supplementary assistance is not available to pensioners who live in government housing.

## Dependent Children

A 'dependent child' is a child aged up to 16 years, or a full-time dependent student child aged 16 to 24 who does not receive an educational or similar allowance. This definition applies to all social security payments. Pensioners who have dependent children will be entitled to receive an additional pension payment for each child. The amount of 'other' income a pensioner may receive before their pension is affected will be correspondingly higher also.

## Fringe Benefits

Pensioners, subject to an income test, may be entitled to receive various fringe benefits, including a range of free pharmaceuticals, telephone rental concession, mail redirection concession, hearing aid services, and certain transport concessions.

### Age Pension

The age pension provides a regular income for aged people. To be eligible for an age pension, a person must satisfy three basic conditions:

- Age: females 60 and over, males 65 and over;
- Residence: in most cases, having lived in Australia for ten years continuously;
   and
- Income test and (from March 1985) assets test.

The 1973 Budget abolished the means test for all people aged 75 or more, and an amending Act passed in April 1975 abolished the means test for all persons aged 70 years or more. From August 1978, the income test was re-introduced for all pensions (except in the case of permanently blind pensioners). This income test did not, however, apply to people aged 70 or more, in respect of the level of pension received in August 1978, but pension increases for such persons became subject to an income test.

In November 1983, a full income test for pensioners aged 70 or more was reintroduced, though the conditions of this test are more beneficial than those of the income test for pensioners aged less than 70. On the death of one of a married pensioner couple, the survivor receives six fortnightly instalments at the married rate before their pension payment is reduced to the single rate.

### Invalid Pension

The invalid pension is payable to people over 16 years of age who are permanently incapacitated for work (to the extent of at least 85 per cent), or are permanently blind.

# Wife's Pension

Where the wife of an age or invalid pensioner does not qualify for an age or invalid pension in her own right, and does not receive a service pension (from the Department of Veterans' Affairs), she may be paid a wife's pension.

#### Spouse Carer's Pension

A spouse carer's pension may be paid to a man who is providing long term care for a wife (or defacto wife) who has a severe disability and receives an age or invalid pension. It will not be paid, however, to men already receiving a social security or service pension. This new pension was introduced from December 1983.

### Widow's Pension

The widow's pension was introduced in 1942, and it provides a regular income for a woman who has lost the support of her partner.

There are three types of widow's pension:

Class A: a 'widow' with at least one dependent child in her care;

Class B: a 'widow' whose Class A pension ceased after she reached 45 years of age, because she no longer had a dependent child in her care; or a 'widow' who is at least 50 years of age, and who has no dependent children;

Class C: a woman whose husband (or de facto husband) has died, who is under 50 years of age, and who has no dependent children but who is in need of financial help. The Class C pension is payable for not more than 26 weeks after the death of the male partner.

For the purpose of assessing eligibility for this pension, a woman may be termed a 'widow' if:

- her husband is no longer living;
- she lived with a man for at least three years immediately prior to his death;
- she is legally divorced;
- her husband has been convicted of an offence and has been imprisoned for at least six months; or
- she has been deserted by her husband for at least six months.

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# Supporting Parent's Benefit

Supporting mother's benefit was introduced in 1973. In 1977 this benefit was extended to include men and was renamed supporting parent's benefit. This benefit may be paid to a person who has the custody, care and control of a child, including: a male divorcee; a widower; a separated husband or wife, or separated de facto husband or wife; an unmarried parent; a sole parent with an adopted child; or a married person who is left caring for a child because his/her spouse has entered a hospital or nursing home on an indefinite basis.

## Sheltered Employment Allowance

Sheltered employment allowance is paid as an alternative to the invalid pension to disabled persons who take work in approved sheltered employment.

# Rehabilitation Allowance

Rehabilitation allowance is paid as an alternative to the invalid pension to people participating on an approved rehabilitation program under the Commonwealth Rehabilitation Service. In some cases a training allowance and living-away-from-home allowance may be paid in addition.

The following table shows, for Tasmania, the number of persons receiving age, invalid and widow's pensions, and supporting parent's benefits, and the amounts paid out in pensions and allowances:

Age, Invalid and Widow Pensioners and Supporting Parent's Benefits, Tasmania

Particulars	1978-79	1979-80	1980-81	1981-82	1982-83	1983-84
Age and invalid pensions—						
Number of age pensioners (a)—						
Males	13 122	13 363	13 408	13 484	13 463	12 765
Females	25 763	26 203	26 592	26 929	27 375	27 205
Persons	38 885	39 566	40 000	40 413	40 838	39 970
Number of invalid pensioners (a)—	50 005	5, 500	.0 000			•
Males	4 365	4 397	4 456	4 592	4 747	5 177
Females	2 052	1 979	2 031	2 023	2 020	2 089
Persons	6 417	6 376	6 487	6 615	6 767	7 266
Number of wife pensioners $(a)(b)$ —	2 641	2 689	2 622	2 571	2 564	2 017
Amount of pensions paid \$'000	117 678	127 382	142 519	163 130	176 095	194 587
Amount of pensions paid \$ 000	117 070	12/ 302	142 317	103 130	170 075	174 307
Widow's pensions—						
Number (a)	5 229	5 358	(c) 5 230	5 153	5 144	5 009
Amount paid \$'000	16 621	18 844	21 003	23 160	24 187	25 885
12mount para minimum \$ 000	10 021					
Supporting parent's benefit—						
Number (a)	2 057	2 260	(c) 3 519	3 920	4 047	4 222
Amount paid\$'000	7 494	8 300	13 591	20 139	22 109	25 523

<sup>(</sup>a) At 30 June. (b) From December 1983, people in receipt of spouse carer's pension are also included. (c) Figures affected by changes in eligibility criteria for supporting parent's benefit (see text).

#### **Benefits**

The following benefits are paid by the Department of Social Security: unemployment benefit, sickness benefit and special benefit.

#### Income Test

The same income test applies to each of the three social security benefits. Under the income test a person may have other income of up to \$20 a week (gross) and still receive the maximum rate of benefit. A married (or de facto) couple may also have a combined weekly income of up to \$20 a week (gross) and still receive the maximum rate of benefit, at the married rate. If the person's (or persons') income is between \$20 and \$70 a week (gross), the maximum rate of benefit payable is reduced by 50 cents for each \$1 of income. Any income over \$70 a week is deducted from the benefit entitlement on a \$1 for \$1 basis.

#### Residence

If a person claiming any of the three benefits has not resided in Australia for at least 12 months, the person must satisfy the Department that he (or she) intends to live here permanently.

# Dependent Children

A 'dependent child' is a child aged up to 16 years, or a full-time dependent student child aged 16 to 24 who does not receive an educational or similar allowance. People who receive a social security benefit, and who have dependent children will be entitled to receive additional benefit payments, and the allowable income limits will be correspondingly higher.

# Unemployment Benefit

To be eligible for unemployment benefit a person must be aged 16 or over, be unemployed, be capable and willing to undertake suitable work, and be taking reasonable steps to obtain work (which includes being registered with the Commonwealth Employment Service). Unemployment benefit is not paid, however, to people who are 'unemployed' because they are engaged in industrial action, or are members of a union engaged in industrial action.

# Sickness Benefit

Sickness benefit is a payment made to a person aged 16 or over, who is unable to work due to temporary illness or injury, and who has suffered an actual loss of income as a result. This benefit may be paid also to a person who is unemployed but unable to look for work because of temporary illness or injury. Supplementary allowance (often called rent allowance) may be paid in addition to sickness benefit to a person who has been receiving the benefit for at least six weeks if the person lives in rented accommodation.

### Special Benefit

Special benefit is a discretionary payment, which may be made to a person in financial need who is not entitled to other forms of government assistance. Examples of special benefit categories include: people ineligible for pensions because they cannot satisfy the residence qualifications; people caring for sick or invalid relatives; a single parent ineligible for supporting parent's benefit because he/she is aged less than 16 years; or a newly arrived migrant or refugee.

The next table gives Tasmanian details for unemployment, sickness and special benefits:

Unemployment, Sickness and Special Benefits, Tasmania Beneficiaries and Payments

1978-79	1979-80	1980-81	1981-82	1982-83	1983-84
26 294	26 316	28 234	32 147	31 686	27 308
10 420	11 121	12 929	16 175	20 355	19 150
10 295	10 579	11 496	14 517	19 458	20 124
28 609	29 665	34 658	49 233	78 302	90 126
3 881	3 559	3 626	3 707	3 750	3 555
731	895	953	878	1 018	1 092
709	746	870			1 054
2 024	2 299	2 901			5 221
				. 010	2 221
2 071	2 051	3 463	3 999	3 652	3 858
		• 105	2 ,,,,	5 052	2 000
556	616	808	774	804	782
					750
1 299	1 487	2 372	2 956	3 428	3 714
***************************************		***************************************		· · · · · · · · · · · · · · · · · · ·	
32 246	31 926	35 323	39 853	39 088	34 721
		55 525	0, 000	57 000	31,721
11 707	12.632	14 690	17 827	22 177	21 024
					21 928
					99 061
	26 294 10 420 10 295 28 609 3 881 731 709 2 024 2 071 556 525	26 294 26 316  10 420 11 121 10 295 10 579 28 609 29 665  3 881 3 559  731 895 709 746 2 024 2 299 2 071 2 051  556 616 525 571 1 299 1 487  32 246 31 926  11 707 12 632 11 529 11 850	26 294 26 316 28 234  10 420 11 121 12 929 10 295 10 579 11 496 28 609 29 665 34 658  3 881 3 559 3 626  731 895 953 709 746 870 2 024 2 299 2 901 2 071 2 051 3 463  556 616 808 525 571 769 1 299 1 487 2 372  32 246 31 926 35 323  11 707 12 632 14 690 11 529 11 850 13 135	26 294     26 316     28 234     32 147       10 420     11 121     12 929     16 175       10 295     10 579     11 496     14 517       28 609     29 665     34 658     49 233       3 881     3 559     3 626     3 707       731     895     953     878       709     746     870     914       2 024     2 299     2 901     3 595       2 071     2 051     3 463     3 999       556     616     808     774       525     571     769     838       1 299     1 487     2 372     2 956       32 246     31 926     35 323     39 853       11 707     12 632     14 690     17 827       11 529     11 850     13 135     16 269	26 294     26 316     28 234     32 147     31 686       10 420     11 121     12 929     16 175     20 355       10 295     10 579     11 496     14 517     19 458       28 609     29 665     34 658     49 233     78 302       3 881     3 559     3 626     3 707     3 750       731     895     953     878     1 018       709     746     870     914     957       2 024     2 299     2 901     3 595     4 618       2 071     2 051     3 463     3 999     3 652       556     616     808     774     804       525     571     769     838     784       1 299     1 487     2 372     2 956     3 428       32 246     31 926     35 323     39 853     39 088       11 707     12 632     14 690     17 827     22 177       11 529     11 850     13 135     16 269     21 199

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### **Taxation**

Income from the following social security payments is classified as taxable income: age pension; wife's pension (where the spouse receives an age pension); spouse carer's pension (where the spouse receives an age pension); widow's pension; supporting parent's benefit; unemployment benefit; sickness benefit and special benefit. In most cases, the amount of income received in a full year from any of these payments is less than the level at which income tax becomes payable. If, however, a person receives other income in addition to their social security payment and this raises their total income above the minimum level, then normal income tax provisions will apply.

Invalid pension, rehabilitation allowance, sheltered employment allowance, mobility allowance, family income supplement, family allowance, handicapped child's allowance, orphan's pension, and additional pension or benefit payments in respect of dependent children are exempt from taxation.

# Payments to Families

# Family Income Supplement

From 1 May 1983, a family income supplement (FIS) was introduced to assist low income families. FIS is an income-tested, non-taxable allowance of up to \$14 a week, payable in respect of each dependent child. It is paid fortnightly, in addition to the monthly family allowance payment. The maximum rate of allowance (currently \$14 a week for each dependent child) is payable if the gross weekly income of the applicant (combined with the gross weekly income of his/her spouse, if both parents work) does not exceed the prescribed limit – \$219 a week at February 1985. For each \$1 income earned above the limit, the maximum amount of FIS payable will be reduced by 50 cents. The point at which entitlement to FIS ceases altogether is also the point at which entitlement to a 'low-income earners' health care card ceases. FIS is not payable if the Commonwealth is already making an income-tested payment for the child (such as TEAS), and it is not payable if the applicant is receiving another social security (or similar) pension or benefit, which includes some payment for the child.

#### Family Allowance

Legislation in June 1976 abolished tax rebates in respect of dependent children, but this was offset by a significant increase in family allowance (previously called 'child endowment'). Family allowance is paid to a person (usually the mother) who has one or more dependent children. As for other social security payments, a dependent child is a child aged up to 16 years, or a full-time dependent student child aged 16 to 24 who does not receive an educational or similar allowance. If the family do not have one year's residence in Australia, the Department must be satisfied that they intend to live here permanently. The amount of family allowance paid has not changed since June 1976.

The following table shows family allowance statistics for Tasmania for recent years:

Family Allowances, Tasmania
Dependants (Children under 16 and Students under 25 years) and Payments

Particulars	1978-79	1979-80	1980-81	1981-82	1982-83	1983-84
Dependent children and students				-		
Children in endowed families	125 359	124 203	123 117	122 893	122 604	123 088
institutions no.	244	209	153	125	125	124
Totalno.	125 603	124 412	123 270	123 018	122 729	123 212
Amount paid during year \$'000	(b) 28 924	30 549	27 765	39 146	39 146	42 820

<sup>(</sup>a) Number at 30 June. (b) Payments affected by rescheduling of payment dates resulting from change from four-weekly to monthly payments.

# Handicapped Child's Allowance

Handicapped child's allowance is a payment to help meet the exceptional costs of caring for a child who has a disability. It is paid to assist parents (or guardians) of a disabled child who choose to provide constant care and attention at home, rather than place the child in an institution. Where a child is not severely disabled, an income test may apply. In Tasmania, at 30 June 1984, this allowance was being paid in respect of 725 severely disabled children, and 214 disabled children. Payments during 1983-84 totalled \$889 440.

# Double Orphan's Pension

The orphan's pension is paid to the guardian of a dependent child if:

• the child's parents, or adoptive parents are no longer living;

one parent is no longer living, and the other is missing, or sentenced to imprisonment for at least ten years, or in a mental institution for an indefinite period;

 the child has been granted refugee status, or has been admitted to Australia under a Special Humanitarian Program approved by the Minister for Social Security.

In Tasmania, at 30 June 1984, this allowance was being paid for 122 orphans, and total payments in 1983-84 were \$81 867.

# Mobility Allowance

Mobility allowance was introduced from April 1983, and is an allowance of \$10 a week that may be paid to disabled people who are unable to use public transport. To be eligible for a mobility allowance a person must be an Australian resident aged 16 or over, who is employed or in vocational training for no less than 20 hours each week. The allowance is free of an income test and is non-taxable. At 30 June 1984, there were 153 people in Tasmania receiving a mobility allowance.

#### Commonwealth Rehabilitation Service

The Commonwealth Rehabilitation Service aims to help disabled people make the best use of their abilities – physically, socially and vocationally. The specific aims are to equip disabled people in the broad working age group for part or full-time work or sheltered employment, for household duties and for independent or semi-independent living at home. The overall aim is to assist disabled people to join or rejoin the community on equal terms.

In Tasmania, the rehabilitation centre is located in Hobart, at the Douglas Parker Rehabilitation Centre. There are also Regional Rehabilitation Units at Launceston, Burnie and Hobart where vocational counsellors, occupational therapists and social workers are available for consultation.

People who have a disability may apply directly for rehabilitation assistance, or they may be referred by a doctor, social worker, employer, friend or relative. The Commonwealth Rehabilitation Service is free unless a compensation or damages claim is pending. In this case, the CRS is entitled to recover its costs from the damages awarded. People taking part on a rehabilitation program may be paid a rehabilitation allowance, which is paid at the same rate as an invalid pension. In some cases they may be eligible for a training allowance as well as a living-away-from-home allowance.

The following table shows the number of people accepted onto rehabilitation programs, and the number of people subsequently placed in employment in Tasmania:

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Operation of the Rehabilitation Service, Tasman
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Particulars	1978-79	1979-80	1980-81	1981-82	1982-83	1983-84
Persons— Accepted for rehabilitation no. Placed in employment no. Expenditure (a) \$'000	310	492	466	548	618	477
	70	116	143	218	150	134
	519	805	1 592	1 456	2 080	2 504

<sup>(</sup>a) Excludes capital expenditure on sites and buildings and administrative costs of the Rehabilitation Service.

# Douglas Parker Rehabilitation Centre

The Douglas Parker Rehabilitation Centre in Hobart is a joint Commonwealth-State project designed to provide a modern rehabilitation facility for Tasmania. A formal agreement with the Tasmanian Government on the operation of the centre was signed by the Minister for Social Security in October 1980 and the total complex was completed and fully operational in March 1982.

The centre provides treatment and training facilities for 120 adults and 80 children and accommodation for approximately 50 rehabilitees.

# Homes for the Aged or Disabled

Under the Aged or Disabled Persons Homes Act 1974, subsidies may be paid to approved organisations that intend to establish accommodation for aged or disabled persons. The aim is to provide accommodation, the conditions of which approach normal domestic life.

The Act provides for building subsidies and separate land subsidies on a \$2 for \$1 basis up to a maximum amount (which is reassessed from time to time). The current maximum subsidy for accommodation in a self-contained unit, hostel or nursing home is: \$15 020 for a single person and \$17 425 for a double self-contained unit. A land subsidy of \$1 920 per person accommodated may be payable. Approved organisations wishing to establish day care centres may be subsidised also to a maximum of \$400 000. During 1983-84 the amount spent in Tasmania was \$1 988 921.

#### Hostel and Personal Care Subsidy

Hostel and personal care subsidy is paid to eligible organisations for people who receive hostel accommodation, and people who receive personal care in a hostel-type aged persons' home eligible under the *Aged and Disabled Persons Home Act* 1974. Since January 1985, the subsidy has been \$11 a week for eligible residents in approved hostel care, plus an extra \$44 a week for personal care services for eligible aged persons.

During 1983-84, 22 Tasmanian organisations cared for approximately 750 residents eligible for the hostel subsidy. Some 400 of these people also qualified for the personal care subsidy. Subsidies totalled \$156,640 for hostel care, and \$866,400 for personal care.

#### Delivered Meals Subsidy

A delivered meals subsidy of 65 cents for each meal delivered (which includes a vitamin C supplement) may be paid to approved organisations that operate a five-day-a-week service. During 1983-84, 32 organisations in Tasmania provided approved meals services, and subsidy payments totalled \$195 452.

# Home and Community Care Program

The Home and Community Care Program, introduced from January 1985, aims to provide a comprehensive range of home and community care services for frail, aged persons and younger people who have a disability.

Home care services include home help, delivered meals, home maintenance, home nursing and paramedical services. Subsidy may also be given to fund additional services such as transport, linen and laundry services and community-based respite care.

This program is intended to provide aged and disabled people with a realistic alternative to institutional care. It is proposed that the new program be cost-shared with the States and Territories and, subject to agreements with the States and Territories, the Commonwealth will contribute more than \$300 million nationally during the next three years.

# Handicapped Persons Welfare

The Handicapped Persons Assistance Act 1974 allows for the funding of specific services for people with disabilities. Service providers are encouraged to comply with the Commonwealth Government's stated policy: that services for people who have a disability should be based on the 'least restrictive alternative' possible. Prescribed services which may attract funding under this Act include: training, activity therapy, sheltered employment, residential accommodation, holiday accommodation, recreational facilities and rehabilitation facilities.

Under the Act, a \$4 to \$1 subsidy may be granted to organisations to assist with the capital cost of projects, the cost of building maintenance, the cost of renting premises, and the cost of equipment. A salary subsidy (of up to 100 per cent) may be paid for two years once an organisation has commenced providing their service,. At other times, an 80 per cent 'key staff' salary subsidy (though only one per organisation), and a 50 per cent salary subsidy may be paid. As part of a 'program upgrading scheme', funding may be provided for independent consultancy services. Expenditure under this Act in Tasmania during 1983-84 totalled \$1 955 724.

# **Homeless Persons Assistance Program**

Under this program, assistance is made by capital grants and recurrent subsidies to help meet operating costs incurred by voluntary organisations and local government bodies which provide accommodation, meals and welfare services for chronically homeless people. Eligible organisations may receive 50 cents for each meal provided, and \$1.50 for each person accommodated. In 1983-84, the total amount spent in Tasmania under the Homeless Persons Assistance Act was \$428 763.

From January 1985, the Homeless Persons Assistance Act was rationalised and, together with a number of other Commonwealth and State programs, was consolidated under the new supported accommodation assistance program. This program is funded and administered jointly by both Commonwealth and State Governments. Capital and recurrent funds will be available for eligible organisations (including local governments) to help meet operating costs. 'Eligible' organisations are those which provide supported accommodation and related support services to men, women, young people, and where appropriate their dependents, who are either permanently homeless, or temporarily homeless as a result of a crisis.

### Child Care

Organisations may receive financial assistance for a range of child care projects, including full day care, occasional care and emergency care. Capital grants, and recurrent grants which include both salary and fee subsidy, are available. Expenditure in Tasmania in 1983-84 totalled \$2 471 081.

# **Emergency Relief**

Funds may be available to agencies and organisations which provide emergency relief to families and individuals. Funds available in Tasmania for 1984-85 are \$184 000.

# State Department for Community Welfare

The broad objective of the Department is to enable individuals and families who require help to function in society to the best of their ability. The Department recognises the welfare of the individual as the basis of the welfare of the Tasmanian community, and ultimately the wider society of which we are a part. It is further recognised that most individuals are either members of families, or have been so for important parts of their

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lives. Financial hardship, societal pressures, marital conflict, disturbed children, as well as other stresses can impair the functioning of individuals, and of families. The State has a responsibility, both directly and indirectly, to enhance the functioning and self-esteem of individuals, to assist in the preservation, strengthening or restoration of the family unit, and to mitigate the effects of disruptions.

The Department's services are provided through its three regional offices and its three area offices in each region, as well as through its family group homes and residential institutions. The services and expenditure of the Department are grouped under four headings: relief, child welfare, grants to organisations and administration and general.

Department	for	Community	Welfare,	Tasmania:	Expenditure
		1	(000'2		

Particulars	1978-79	1979-80	1980-81	1981-82	1982-83	1983-84
Administration and general Relief Division Child Welfare Division Grants to organisations	2 943 2 616 1 053 630	3 274 2 878 1 152 828	4 038 1 759 1 183 1 208	4 609 1 194 1 243 1 421	4 670 1 383 1 320 1 635	5 312 1 600 1 578 1 989
Total	7 242	8 132	8 188	8 467	9 008	10 479

## Relief Division

The functions of this Division are to investigate applications for assistance from parents with dependent children and to give food vouchers or cash relief where necessary; to issue heating allowances (subject to an income test) to age, invalid and widow pensioners; and to help pay for funerals, transport, furniture removals, spectacles, etc. for persons in needy circumstances.

# Child Welfare Division

The Child Welfare Act 1960, and subsequent amendments, is the statutory authority for a wide range of work. Other special aspects of the work are covered by the Adoption of Children Act 1968, Domestic Assistance Service Act 1947, as well as some Commonwealth legislation, i.e. Family Law Act, Immigration (Guardianship of Children). In carrying out its mandate in these areas the Department's main focus is the welfare of the family, with the interests of children being the primary concern.

At 30 June 1984, the Department employed 75 child welfare officers who provide a range of direct personal services to children and families. Voluntary supportive casework is offered to families who are experiencing difficulties and need help. Homemaker services as well as financial assistance are provided as necessary. In providing residential care for children and young people, the Department's view is that, wherever reasonably possible, this should be supplementary to the care provided by natural parents, rather than substituting for it.

For young offenders, the Department considers that the best interests of both the individual and the community are most appropriately met by a positive and supportive approach designed to promote self-value and responsibility, as well as by developing opportunities for the individual to adopt a more socially acceptable way of life. Children who appear before the children's court for offences or because they are believed to be 'neglected' may be placed under the supervision of a Child Welfare Officer or made Wards of the State.

Supervision: At 30 June 1984, there were 165 children under the legal supervision of Child Welfare Officers:—

Southern Region	************	67
Northern Region		31
North-West Region		67

Wards of the State: Once a child has become a Ward of the State, the Director of Social Welfare becomes his/her legal guardian to the exclusion of all others. Through the

staff of the Department, and with the help of individuals and groups in the community, the Director may exercise this responsibility for guardianship in a variety of ways.

In many cases it is considered to be in the best interests of a child to provide care by supplementing, rather than substituting, for the care offered by his natural parents. Where it is necessary to remove the child from his normal home, it often remains possible to assist both the child and parents in a way which leads towards the re-establishment of a normal, healthy parent/child relationship.

The following table lists the actual location of wards as at 30 June 1984. It should be noted that all the placements listed also provide care for children who are not wards.

Children Under Guardianship of the Community Welfare Department at 30 June 1984

Type of placement	Number of children
Residential child care establishments—	
Approved children's homes	58
Family group homes	27
Community welfare institutions	18
Total	103
Foster homes	242
Hospitals	2
Living with parent or relative	156
Other adult care	16
Living independently	12
Other placements	11
Unauthorised absences	5
Total Wards of State	547

Adoption: Under the Adoption Act 1968 the Department provides an adoption service and licenses the State's only private adoptive agency. In the year ended 30 June 1984 there were 87 adoption orders made. Of this total 41 were in respect of adoptors who were naturally related in some way to the child, and 46 were in respect of children who were not related to their adoptors.

Early Childhood Services: The Family and Children's Services Branch of the Department fulfils the legislative responsibilities involved in Part 6 of the Child Welfare Act 1960, that is the licensing and supervision of facilities where a fee is charged to provide substitute care for children younger than seven years. These responsibilities include assessment of applicants, maintenance of a support service to licensees, and the keeping of records of holders of current licences. In carrying out these duties, the over-riding aim is to encourage and develop a range of services to meet the needs of families who require substitute day care or short term overnight care for their children.

The following table shows the location and type of services for which licenses were current as at 30 June 1984:

Licensed Child Care Facilities at 30 June 1984, Tasmania

Type of service	South	North-	North West	Total
Family day carers—				
In schemesOutside schemes	376 31	242	58 45	676 76
Play centres	10	15	. 15	40
Child care centres	29	5	12	46
Play sessions	10			10
Total	456	262	130	848

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# Grants to Organisations

The Department has been given a limited responsibility in the area of individual welfare, e.g. the young unemployed, the handicapped and the aged. This role finds its expression in specific government endorsed programs, and the provision of grants to voluntary organisations and self-help groups. In providing grants to the non-government sector, the Department endeavours to ascertain that the aims of the applying agency are in accord with the overall objective of the Department.

The total allocations to grants programs in the year ended 30 June 1984 was as follows:

Sundry Social Services Grants	\$514 949
Women's Shelters	\$478 941
Handicapped Persons Services	\$449 883
Youth Services	\$218 460
Early Childhood Services	\$152 035
Neighbourhood Houses	\$159 408
Multicultural Affairs	\$15 142

In addition, the Department co-operated with the Commonwealth Government in the administration of the Family Support Services Schemes and the Youth Services Schemes. As well, the Commonwealth sought the Department's advice on the distribution of its grant to emergency relief group agencies.

#### REPATRIATION SERVICES AND PENSIONS

## General

The Department of Veterans' Affairs was originally established as the Repatriation Commission under Commonwealth legislation in 1920. The Department is responsible for:

 the payment of disability and service pensions to eligible veterans and their dependants;

the provision of medical treatment to veterans for injuries and illnesses which have been determined to be related to service;

 the provision of medical treatment to widows and dependants of deceased veterans whose deaths are deemed to be service-related; and

• the provision of medical treatment for disabilities, whether service-related or not, for veterans of the Boer War, the 1914-18 War, all ex-prisoners of war and for other veterans under certain circumstances.

The Department is also responsible for functions administered by the Defence Service Homes Corporation and the Office of Australian War Graves.

Repatriation benefits are provided for men and women who served in the Australian Forces in the 1914-18 War, the 1939-45 War, the Korea-Malaya Operations, the Far East Strategic Reserve, special service in special areas overseas including Vietnam, and service with the Defence Force on or after 7 December 1972. Benefits have recently been extended to members of certain Peacekeeping Forces. Benefits may also be provided for seamen in respect of Maritime Service during the 1939-45 War under the Seamen's War Pensions and Allowances Act.

### **Repatriation Pensions**

Disability pensions are payable to veterans as compensation for incapacity accepted as service-related, and are not subject to an income test. Service pensions, in general, are payable to male veterans who have attained the age of sixty years and to female veterans who have attained the age of fifty-five years. They are subject to an income test (and assets test from 14 March 1985) and are broadly equivalent to age and invalid pensions.

Disability pensions may be granted to veterans whose incapacity has been accepted as related to service under the following provisions:

- resulted from an occurrence on service (applies to those veterans who saw active service):
- arose out of, or is attributable to, service; or
- has been contributed to in any material degree, or has been aggravated by, the conditions of service.

Dependants' pensions may be granted to dependants of veterans whose death or incapacity has been accepted as service-related under these provisions.

Veterans who receive disability pensions are also eligible for free medical and hospital treatment for their service-related incapacity. With certain categories of pensioners, the eligibility for free treatment is widened to cover all disabilities. It is also possible for a veteran to qualify for free treatment for a disability without necessarily being granted a pension.

A service pension may be granted, subject to an income test (and assets test from 14 March 1985) in most cases, to the following:

- a male veteran who served in a theatre of war, and has attained the age of 60 years or is permanently unemployable;
- a female veteran who served in a theatre of war, or served abroad, or embarked for service abroad, and has attained the age of 55 years or is permanently unemployable; or
- the wife of a service pensioner who is not receiving a service pension as a female veteran.

In certain circumstances, service pensions may be granted to veterans of British Commonwealth and Allied countries, and the Australian, Commonwealth and Allied mariners of the 1939-45 War. The conditions governing the income test (and assets test from 14 March 1985) are similar to those for age pensions described earlier in this chapter.

Details of selected repatriation benefit rates are shown in the following table:

Repatriation Benefits, Tasmania (a) (\$ Per Week)

	Rate						
Benefit	At 12 May 1983	At 10 Nov. 1983	At 10 May 1984	At 8 Nov. 1984			
Payable Witi	hout Income a	nd Assets (b) Te	est				
Disability pensions—							
Special rate (TPI) pensions—							
Veteran	157.75	164.55	171.30	171.30			
Wife	4.05	4.05	4.05	4.05			
Each child	1.38	1.38	1.38	1.38			
Intermediate rate pensions—							
Veteran	108.65	113.30	117.95	117.95			
Wife	4.05	4.05	4.05	4.05			
Each child	1.38	1.38	1.38	1.38			
General rate pensions (maximum rates)—							
Veteran	59.50	62.05	64.60	64.60			
Wife	4.05	4.05	4.05	4.05			
Each child	1.38	1.38	1.38	1.38			
War widows—	1.00	1.00					
Pension	82.35	85.90	89.40	91.90			
Domestic allowance	12.00	12.00	12.00	12.00			
Orphans' pensions—	12.00	12.00					
Father dead—							
Each child	16.60	18.45	18.45	19.20			
Both parents dead—	10.00	10110	101.0	17.20			
Each child	33.20	36.90	36.90	38.40			

# Repatriation Benefits, Tasmania (a) (\$ Per Week)—continued

	Rate					
Benefit	At 12 May 1983	At 10 Nov. 1983	At 10 May 1984	At 8 Nov. 1984		
Payable Subject to Inco	me and Assets	s (b) Test (Max	imum Rates)			
Service pensions—						
Veteran—Standard (single person)	82.35	85.90	89.40	91.90		
Married	68.65	71.60	74.55	76.65		
Addition for each child	10.00	12.00	12.00	14.00		
Wife's pension (if she is not a pensioner)	68.65	71.60	74.55	76.65		
Guardians' allowances—						
Where there is a child under six years						
or an invalid child requiring full-time						
care	8.00	8.00	8.00	10.00		
Other cases	6.00	6.00	(c)	(c)		

- (a) Details relating to conditions of eligibility for the various pensions are available from the Department of Veterans' Affairs.
- (b) Applicable from 14 March 1985.
- (c) Discontinued from 10 May 1984.

### Disability Pension Payments

At 30 June 1983 the proportions of veterans in Tasmania receiving disability pensions were: in respect of service in the 1914-18 War, 2.2 per cent; the 1939-45 War, 88.4 per cent; the Korea and Malaya Operations, 2.2 per cent, and other operations 7.2 per cent.

The following table shows, for Tasmania, the number of pensions in respect of veterans and their dependants, together with expenditure on disability pensions:

Disability Pensions, Tasmania, Pensioners and Payments

Year	Nun					
		Dependa	nts of—		Expenditure during	
	Incapacitated veterans			Total	year (a) (\$'000)	
1978-79		7 521	8 678	1 928	18 127	18 696
1979-80	***************************************	7 349	8 400	1 753	17 502	19 389
1980-81	***************************************	7 137	8 072	1 735	16 944	21 918
1981-82		7 040	7 890	1 751	16 681	22 965
1982-83		7 062	7 836	1 907	16 805	28 887
1983-84		7 065	7 708	2 010	16 783	33 968

<sup>(</sup>a) Includes widow's allowance.

### Service Pension Payments

The following table shows, for Tasmania, the number of service pensions in respect of veterans and their dependants, and expenditure on pension payments:

<sup>(</sup>b) Includes war widow's pension.

	Nur					
Year	Veterans	Dependo	unts of—	T !	Expenditure during year (\$'000)	
		Living pensioners	Deceased pensioners	Total		
1978-79	5 428	3 466	53	(a) 8 947	(a) 18 486	
1979-80	5 962	3 867	51	9 880	21 831	
1980-81	6 731	4 558	58	11 347	27 441	
1981-82	7 191	4 874	8	12 073	32 529	
1982-83	8 118	5 597	20	13 738	42 347	
1983-84	8 754	6 076	48	14 878	51 830	

Service Pensions, Tasmania: Pensioners and Payments

(a) Includes British Commonwealth pensions.

#### **Medical Services**

To discharge these functions in Tasmania, the Department of Veterans' Affairs maintains a branch office, a general hospital and an artificial limb and appliance centre in Hobart. Facilities exist at the Repatriation General Hospital for medical treatment of hospitalised patients and specialist services for out-patients. Generally, treatment for out-patients throughout the State is provided by doctors appointed by the Department as Local Medical Officers. People entitled to treatment can select a doctor from the panel of LMOs and receive treatment at departmental expense. Payment for treatment in hospitals other than the Repatriation General Hospital is met by the Department only in certain circumstances.

Free treatment is available for all veterans of the Boer War, the 1914-18 War, the 1939-45 War who receive a Disability Pension at, or above, 50 per cent of the General Rate plus a Service Pension and for all ex-prisoners of War (this includes medical, hospital, dental, ophthalmological and para-medical treatment and subject to a contribution of \$86.80 per week, and treatment in nursing homes). Veterans who are suffering from malignant cancer are eligible for free medical and hospital treatment and to nursing home treatment subject to a contribution of \$86.80 per week. The only exception to this rule is that veterans who are admitted to a nursing home for treatment of a service-related disability are exempt from payment of the patient contribution.

The facilities of the Repatriation Artificial Limb and Appliance Centres are available to provide free artificial limbs to both repatriation beneficiaries and the general public. The Vietnam Veterans' Counselling Service has been established to assist Vietnam veterans and their families with their health and social problems by direct counselling and referrals to government or other community agencies.

#### Soldiers' Children Education Scheme

### Eligible Children

Educational assistance is granted to veterans' children under the following circumstances:

- if the veteran's death has been accepted as service related or if he was in receipt of a disability pension for total and permanent incapacity or for specific disabilities at the time of death;
- if the veteran, as a result of service, is blinded or totally and permanently incapacitated;
- if the child has lost both parents, and the veteran was a member of the Forces and served in a theatre of war; or
- if the veteran (who was a member of the forces and served in a theatre of war) is deceased, and the orphan is not being cared for by the remaining parent, step-parent or adoptive parent.

Benefits

For children under 12 years, the scheme pays the cost of school requisites, essential text books and fares. At secondary level, the weekly maximum payments for children living at home are: 12 years to 14 years \$6.75, 14 up to 16 years, \$9.35, 16 up to 18 years, or to matriculation \$20.05. At tertiary level, those living at home may receive between \$33.25 and \$35.10 per week and those living away from home, between \$55.05 and \$57.00 per week; these rates are subject to the number of tertiary students in the family. An independent rate of \$62.40 per week may be paid to eligible tertiary students, subject to certain conditions.

Further details regarding the Soldiers' Children Education Scheme may be obtained from the Department of Veterans' Affairs.

### **HEALTH SERVICES**

### Department of Health Services

Introduction

The Department of Health Services is one of the major employing departments in the State Government with a budget in excess of \$166 million. Under the jurisdiction of the Minister for Health, it is administered by the Director-General of Health Services as permanent head and through him by Divisional Directors and Directors of Services. The Department is responsible for the maintenance of the health of the community, prevention of disease and the provision of government hospital and medical services. A major function is resource allocation and monitoring financial performance and activity levels of public hospitals.

Services provided directly by the Department include school dental, child health, school medical, district medical, handicap assessment, health education, the Government Analyst Laboratory and the two institutions directly administered by the Department, St John's Park Hospital for the elderly and the Mothercraft Home.

In meeting the challenges thrown up by an expanding modern community, the Department has done pioneering work and notched up several Australian firsts. For example, Tasmania was the first Australian State to make chest X-rays compulsory and led Australia in the introduction of fluoride to drinking water. The Department scored another Australian first when it established a special training school for geriatric nursing, in association with St John's Park Hospital as far back as 1964.

A feature of the Department's work are initiatives in the health promotion field. In a bid to take preventive medicine messages to the State's scattered population, more emphasis is being given to the use of the mass media. The Department publishes regular supplements on health issues in major newspapers. During 1985 a mobile health promotion unit will be touring the State to emphasise the benefits of a healthy lifestyle. This unit will use computers in its assessment of individuals' health.

Following a review of the Department by the Public Service Board, 1985 will be a year of readjustment and implementation of necessary changes. A start has been made with the refinement of the Department's goals and development of objectives. These goals are: to improve the health status of the Tasmanian population; to implement the health policies of the Tasmanian Government and to plan, develop, provide and administer health services in Tasmania.

The following objectives have been set:

- the development of an appropriate balance between preventive and curative services including the allocation of adequate resources for preventive services:
- the removal of any inappropriate imbalance between the provision of inpatient services and services provided in the community;
- to ensure that the public is aware of health issues and problems through an effective health education service;

- to provide all services as efficiently and effectively as possible;
- to provide equal access to services that meet the defined needs of the communities they serve;
- to ensure that the public and private sectors are integrated and unnecessary duplication does not occur; and
- to develop improved research, planning and evaluation systems for health care services.

The Department is specifically responsible for providing:

- public hospital management advisory services and the licensing of private hospitals and other medical establishments under the Hospitals Act 1918:
- District Medical Service:
- School Dental Service:
- Nurses' Registration Board and Dental Mechanics' Registration Board;
- legislation concerned with health and allied matters;
- certain specialist medical services;
- State Drug Advisory Committee;
- liaison with the health departments of other States and the Commonwealth Government; and
- liaison with professional, medical, dental and nursing associations.

The Director-General is the controlling authority under the Hospital Employees' Award, the Medical Officers' Award and the Nurses' (Public Hospitals) Award. The Department also controls and maintains Crown property occupied by the various sections of the Department and deals with the appointment and salaries of staff who are not officers of the Public Service.

Department of Health Services, Tasmania: Expenditure from Consolidated Revenue (\$'000)

(3:000)					
Particulars	1978-79	1979-80	1980-81	1981-82	1982-83
Administration, head office	854	859	975	1 046	1 132
Hospital and medical services—					
Administration	578	554	577	562	539
Grants to hospitals	66 416	75 677	84 366	91 210	90 187
Medical services, country districts	510	483	465	511	499
Dental Health Service	2 798	2 950	3 330	3 279	3 277
Nurses' Registration Board	55	74	83	93	111
Interim Ambulance Authority	1 774	1 925	2 603	2 963	3 960
Government Analyst and Chemist	382	399	468	515	533
St John's Park Hospital	6 722	7 830	8 720	10 000	10 292
Public Health—					10 -7 -
Administration and inspectors	684	711	843	798	696
School Medical Service	570	637	690	772	810
Child Health Service	642	782	842	1 014	1 079
Community Health Services	1 950	2 120	2 472	2 440	2 992
Tuberculosis and cancer registry	90	109	115	129	140
Miscellaneous grants and expenses	2 520	3 117	3 042	3 848	4 526
Total	86 545	98 227	109 592	119 180	120 773

# School Dental Health Service

This service, available free to children up to school leaving age, aims to examine and provide necessary treatment each year for every child, for whom parental consent is given.

At the end of June 1984, 41 static clinics had been established, there were 55 mobile dental units providing care in other schools and a consulting orthodontic service based in Hobart.

Dental Therapists: Tasmania became the first Australian State to develop a School of Dental Therapy in 1966. Students are trained (in a two year course) for service in Tasmania, on behalf of the Australian Capital Territory Health Commission and the

Australian Development Assistance Bureau. Tasmanian graduates are appointed to clinics throughout the State. The School is located in Hobart and has residential hostel accommodation for up to 30 students.

#### Fluoridation

In 1953 Beaconsfield became the first local government authority to add fluoride to its water supply and Launceston followed in 1961. In 1964 Hobart became the first Australian capital city to add fluoride to its water supply.

The Parliament passed the *Fluoridation Act* 1968, setting up a Fluoridation Committee with power to recommend to the Minister for Health the fluoridation of any public water supply and to oversee fluoridation operations.

By June 1984, fluoridation had been extended to include: the whole of the greater Hobart area served by the Derwent and Southern Regional Water Supply Schemes, extending as far afield as Sorell, Campania, Kempton, New Norfolk and Snug; the City of Launceston and surrounding areas supplied by the West Tamar and North Esk Regional Water Supplies; and numerous towns supplied by individual schemes including Burnie, Devonport, Smithton, Queenstown, Deloraine, Scottsdale, St Helens, Campbell Town, Oatlands, Strathgordon, Huonville, Ranelagh, Cygnet, Geeveston, Dover, Tullah, Zeehan, Savage River, Bridport, Somerset, Ulverstone and Wynyard.

## District Medical Service

In 1937 the Government undertook to help the more remote municipalities obtain medical services. Up until June 1975, participating municipalities levied a rate under the Local Government Act 1962, as amended, and met between one-half and one-third of the cost of the scheme. From July 1975, the Commonwealth Government has contributed 50 per cent of the operating costs of the scheme by means of a Health Program Grant under the Health Insurance Act, the remaining 50 per cent being financed from State funds. The Commonwealth Government withdrew from the Scheme in June 1982.

The State Government has undertaken to continue to provide practitioners at the existing practices but the scheme is no longer free. All patients will be required to pay the scheduled fee except for pensioners and holders of Health Cards.

Established practitioners have been offered the choice of continuing in salaried practice, all revenue being returned to the Government, or taking over the practice as a private one. Replacement practitioners will only be installed on a private practice basis. In most instances, the Government will guarantee a gross level of income.

### Community Health Services

There are seven community health centres in Tasmania situated at Clarence, Rokeby, Bridgewater, Kings Meadows, Ravenswood, Rosebery and Queenstown. Home nursing and home care services are available in all parts of the State, generally based upon the local hospital, and currently maintain some 6 000 patients in their own homes. These services work in close conjunction with Meals on Wheels, Red Cross Transport, and the majority of volunteer organisations who are involved in such services.

#### Pharmaceutical Services Section

The Pharmaceutical Services Section has numerous advisory, supervisory and regulatory functions under regulations and legislation relating to narcotics, poisons, medicines, chemicals and therapeutic goods.

# Nursing

The registration of nurses and nursing education are within the jurisdiction of the Nurses' Registration Board which also regulates the practice of registered midwives and approves courses in nursing education and hospitals and institutions as schools of nursing.

There are five schools for general nursing, four midwifery and one for child health. A three year course in Psychiatric Nursing is conducted in one hospital and a two year

course in Auxiliary Nursing at two hospitals in the State. Registers are maintained for all the above categories of nursing.

Diploma of Applied Science (Nursing) and Bachelor of Applied Science (Nursing Administration and Nursing Education) courses commenced at the Tasmanian College of Advanced Education, Newnham in 1982.

A register is maintained of child health nurses and a roll is kept of mothercraft nurses. The mothercraft nursing course and examinations are conducted under the board's jurisdiction, provision having been made for this under the *Nurses Registration Act* 1983.

### Division of Public Health

#### General

The Division of Public Health has responsibility for the preventive medical services of the State. The Director is responsible for the operation of the *Public Health Act* 1962 (as amended) and the control of Medical Officers of Health and other health officers employed by the Department of Health Services and municipalities throughout the State. A major responsibility is public immunisation programs, conducted through the municipalities; preparations distributed include the Sabin anti-poliomyelitis vaccine and the triple antigen vaccine (against whooping cough, tetanus and diphtheria). The Division is responsible for the Nutrition Advisory Service; occupational health; environmental sanitation; pure food quality control; and the public health aspects of the building regulations. Other major functions are discussed separately in the following sections.

# Notifiable Diseases

Certain diseases are notifiable under the *Public Health Act* 1962, the aim being to prevent or check their spread. The following table shows the incidence of notifiable diseases in Tasmania for a six-year period:

Notifiable Diseases Reported to Department of Health Services, Tasmania (Number of Cases)

(Number of Cases)						
Particulars	1978-79	1979-80	1980-81	1981-82	1982-83	1983-84
Amoebiasis		2	_	_	_	_
Brucellosis		_		1		1
Gonorrhoea	181	183	189	169	116	50
Hydatids	1	1	3	4	1	2
Infectious hepatitis	122	41	29	40	25	10
Leptospirosis		_	1		1	4
Malaria	1	4	i	2	_	7
Ornithosis	ī		_	_	2	
Salmonella infections	22	32	30	32	71	99
Serum hepatitis	1	5	_			Ŕ
Shigella infections	ī	_	2	4	10	_
Syphilis	ż	2	_	<u> </u>	í	4
Tetanus		_				i
Tuberculosis	26	16	30		13	22
Typhoid fever (incl. paratyphoid)	1	_	2	_	_	
Total	250	207	205	252	240	200
Total	359	286	287	252	240	208

Special conditions apply to venereal diseases. Persons suffering from them must not marry until cured, or engage in the manufacture or distribution of foodstuffs, and are liable to arrest and detention if they fail to continue treatment until cured.

Quarantine provisions and tuberculosis are dealt with in later sections.

# Child Health Service

In 1984 there were 115 Child Health Centres and 12 travelling units. Triple certificated child health nurses attached to these Centres advise mothers on all aspects of caring for babies and young children. Mothers are advised on infant feeding, child

development and other health and social problems that occur in the family. The registered nurses screen children's growth and development to detect, as early as possible, a deviation from the normal pattern of development and refer these to the family doctor or the appropriate agency for investigation and/or early treatment. Child health nurses visit new born babies at home and continue the supervision and support either at home or, more commonly, in the Child Health Centre where individual records are maintained. Nurses also arrange for examinations to be carried out by family doctors under the Pre-School Medical Scheme. Departmental medical officers carry out examinations in Child Health Centres.

Voluntary Child Health Association Committees working for the Centres raise money for furnishing and equipping Centres which are usually built by the Department. The Committees also meet running costs such as heating, lighting, cleaning and telephones.

The Mothercraft Home: This home, located in Hobart, provides training for qualified nursing sisters who want to gain child health nursing certificates and for women who want to become mothercraft nurses. It accommodates children under six years old who need care or who cannot be looked after at home, and mothers learning to look after children or having feeding problems.

#### School Health Service

This is available free to children attending government and independent schools from kindergarten to matriculation level. Each school is visited annually by school medical officers who fully examine children at entry. Many children are also fully examined in their 11th and 15th years. In addition, children known to have defects are reviewed and special examinations are arranged for children whose physical health, behaviour or educational progress may be causing concern. Every year about 27 000 children are examined by school doctors. About 19 per cent are found to have some defect, and these are referred to family doctors, specialists and hospital clinics and other appropriate agencies for investigation.

School nurses visit schools regularly to supervise the health and hygiene of pupils. They maintain medical records, examine for infestations, test sight and hearing, assist at medical examinations and follow-up cases in which defects are diagnosed. Where there has been no indication for concern about a child's health, the nurse examines the child thoroughly in the 5th grade. If there is any concern the child is referred to the medical officer.

Nurses contribute to health education and research projects and may organise immunisation sessions at their schools.

## Handicap Assessment Centres

Assessment Centres have been established in Hobart, Launceston and Burnie. These Centres are a co-operative venture between the Health and Education Departments. Staff levels vary between centres, depending on demand, and comprise medical officers, nursing sisters, psychologists, and occupational speech therapists, physiotherapists and social workers. Children referred to these Centres because of developmental delay or 'at risk' status, are assessed using a team approach. Specialists in other government and private agencies are consulted with respect to data input, and arrangements made for treatment or supportive community-based programs for children referred.

#### **State Controlled Hospitals**

#### General

In Tasmania, medical establishments include hospitals, nursing homes, geriatric establishments, convalescent homes, orthopaedic units, etc. Some are privately administered while the State Government accepts the major financial responsibility for others; in the case of the latter group, control is either direct or exercised through hospital boards.

Institutions controlled by the State include four general hospitals, 14 district hospitals, 11 hospital annexes and district nursing centres with bed accommodation and six without, one mental hospital, two maternity hospitals and three nursing homes for the aged. (The Department of Health Services directly administers one nursing home for the aged.) These institutions could all legitimately be described as 'public'. However, in the tables in this section, the term 'public' is applied only to the general and district hospitals, the other types of institutions being specified separately.

## General Hospitals (Public)

Hospitals providing all facilities and specialised treatment are the Royal Hobart, Launceston General, Mersey General (at Latrobe and Devonport) and North-Western General (with divisions at Burnie and Wynyard). The Queen Alexandra (Hobart), a division of the Royal Hobart Hospital, and the Queen Victoria (Launceston) are maternity hospitals.

Specialist treatment is available at general hospitals in obstetrics, gynaecology, orthopaedics, urogenital surgery, plastic and reconstructional surgery, neuro-surgery and neurology, radiology, pathology, radiotherapy, psychiatry and ophthalmology; skin diseases and venereal diseases are also treated and clinics operate in thoracic medicine and surgery. An emergency obstetric service, with specialists based in Hobart and Launceston, provides a free service to the smaller public hospitals, district nursing hospitals and district medical officers outside the two cities.

The Douglas Parker Rehabilitation Centre provides physiotherapy, occupational therapy, speech therapy and other associated rehabilitation services to day patients and in-patients who are accommodated in hostel beds. It is administered through the Royal Hobart Hospital.

The Peacock Convalescent Hospital in Hobart is run by a committee of management, most of its patients being referred from the Royal Hobart Hospital.

#### Medicare Agreement

As of 1 February 1984, the Tasmanian Government entered into the Medicare Agreement with the Commonwealth Government, concerning the provision of joint funding of recognised public hospitals. This Agreement will continue until 1987, with provision for review in the interim period. The Medicare Agreement has replaced the Hospital Cost Sharing Agreement which was due to run until June 1985.

#### Raising of Fees

The Medicare Agreement requires the State to provide in-patient and out-patient services at no charge to eligible persons.

Provision exists for patients to elect to be treated as a private patient within the Queen Alexandra Hospital and the Queen Victoria Hospital, this treatment to be provided by a medical practitioner of the patient's choice. An accommodation charge is levied on these patients.

Provision also exists for patients at the Royal Hobart Hospital to elect to be treated as an Intermediate Patient by their own doctor, who charges the patient on a fee for service basis. Again, the hospital charges the patient an accommodation fee. The medical practitioner pays the hospital a facility charge for use of the hospital resources.

Charges will also continue to be raised for certain other groups of patients such as those with entitlements under the Workers' Compensation Act and the Motor Accidents (Compensation and Liability) Act.

## Computerised Information Systems

Following the introduction of Medicare on 1 February 1984, the State-wide computer network has been further developed to meet the Commonwealth's requirements for information. Data from Tasmanian public hospitals is being stored on computer as part of the patient billing system, and can be extracted on a monthly basis for reporting to the

Commonwealth. This development has led to other functions becoming available, providing hospitals with patient master index systems and admission transfer separation systems. These give hospitals access to in-patient status by ward and by admission reports, infection and disease reports, switchboard enquiry and staff data entry reports.

## State Controlled Hospitals: Finances and Patients

The following tables give summaries of the financial operations and patient numbers of State controlled hospitals and hospitals for the aged:

State Controlled Hospitals and Hospitals for the Aged, Tasmania Accommodation and In-Patients

Powier I	Hospi (excluding		Mental h and other i facili	n-patient	Hospita the a	
Particulars -	1982-83	1983-84	1982-83	1983-84	1982-83	1983-84
Hospitals and homes no.	21	21	4	4	5	5
Bed days no.	497 724	515 254	252 594	253 822	245 368	240 405
Beds available no. In-patients—	2 046	2 016	771	771	826	826
Total number treated	56 637	59 335	2 292	2 385	912	1 015
patients during year	1 364	1 412	695	694	672	659
Total\$'000	86 209	98 518	17 496	19 344	8 202	7 242
Daily average per patient\$	207.73	215.71	68.99	76.21	70.16	77.58

NOTE: Figures for patients treated in psychiatric units of General Hospitals are included under 'hospitals'.

State Controlled Hospitals and Hospitals for the Aged, Tasmania Receipts and Payments (a), 1983-84
(\$'000)

		(Φ 000)			
	Hospit	als (excluding r	nental)		Hospitals
Particulars	Public (b)	Maternity (c)	Total	Mental hospitals (d)	Hospitals for the aged
Receipts—					
Government aid—					
State	49 755	1 513	51 268	14 378	4 229
Commonwealth	49 755	1 513	51 268	145	4 229
In-patient fees	19 341	1 973	21 314	2 528	3 003
Out-patient fees	3 491	16	3 507	_	9
Other	9 021	1 404	10 425	198	8 758
Total	131 363	6 419	137 782	17 249	20 228
Payments-					
Šalaries and wages	93 227	4 174	97 401	13 104	14 785
Provisions	2 617	90	2 707	(e)	1 291
Domestic supplies	3 005	111	3 116	(e)	414
Dispensary, etc.	9 550	185	9 735	(e)	242
Other	23 128	1 859	24 987	4 145	3 293
Total	131 527	6 419	137 946	17 249	20 025

<sup>(</sup>a) Excludes expenditure from State Loan Fund.

<sup>(</sup>b) Includes general and district hospitals; includes maternity wards in public hospitals.

<sup>(</sup>c) Excludes maternity wards in public hospitals.

<sup>(</sup>d) Refers to Royal Derwent Hospital incorporating Millbrook Rise.

<sup>(</sup>e) Not available on a comparable basis; included in 'Other'.

## Hospitals for the Aged and Invalid

#### Hospitals for the Aged and Invalid Government Hospitals for the Aged, Tasmania, 1983-84

			Αμ	proved nursin	g home beds	1	
	Bed days						
Hospital	Other accomm- odation	Beds avail- able	Ordinary with ext care benefit	Ordinary	Total	Daily average	Per cent occup- ancy
Cosgrove Park (a)	136	144	25 649	21 027	46 676	127.87	88.80
St John's Park Spencer Nursing	20	541	66 850	76 383	143 233	392.41	72.53
Home (b) Mersey Nursing		66	18 505	4 913	23 418	64.15	97.21
Home Webster Nursing	_	67	18 421	5 765	24 186	66.26	98.90
Home		8	1 566	1 326	2 892	7.92	99.04
Total	156	826	130 991	109 414	240 405	658.61	79.73

- (a) Cosgrove Park is administered as part of the Launceston General Hospital.
- (b) This is a geriatric wing of the Wynyard Division of the North-West General Hospital.

## District Hospitals (Public)

These do not provide the diverse range of services available in the general hospitals, and do not have resident medical officers. They are located at Beaconsfield, Campbell Town, Currie, Franklin, Longford, New Norfolk, Ouse, Queenstown, Rosebery, St Helens, St Marys, Scottsdale, Smithton and Ulverstone.

#### Private Medical Establishments

There are 98 private medical establishments in Tasmania operated by charitable and church organisations and by private individuals or organisations. Most are concerned with care of the aged but five are hospitals with a more general purpose and one is a psychiatric hospital. Also, seven are used for the accommodation of physically and mentally handicapped persons. All 98 are registered under Part III of the State Hospitals Act but six are also registered under the Commonwealth National Health Act and Health Insurance Act as hospitals. These are Calvary, St Johns, St Helen's and Hobart Clinic in Hobart, and St Lukes and St Vincent's in Launceston; all provide medical and surgical services except Hobart Clinic. 43 of the remaining establishments are licensed to provide nursing home care and 27 to provide accommodation for ambulant patients only.

The largest units in the non-hospital group are: Hobart area, A.A. Lord Homes (111 beds), St Ann's Rest Home (126), Freemasons Home (126), Lillian Martin Home (126), Mary's Grange (91), Strathaven Lodge (117), Queen Victoria Home for the Aged (87); Launceston area, Nazareth House (103), Ainslie House (58); North-Western area, Meercroft Home for the Aged (96), Eliza Purton Home for the Aged (91).

#### Government Analyst's Laboratory

This laboratory analyses a wide variety of foods, drugs and other substances and undertakes work for Government departments and the public. Its work includes food and agricultural chemistry, forensic chemistry and toxicology, analysis for industrial hygiene purposes, water and corrosion problems, and other matters such as blood alcohol examinations for Road Safety (Alcohol and Drugs) Act purposes.

#### Other Health Matters

#### Child Health Institutions

These are medical institutions run by the State or subsidised by public funds. They provide treatment and supervision along with general education. The Sight Saving School, School for the Blind and Deaf, Talire (for retarded children) and Wingfield (for orthopaedic patients) are government institutions for children with particular defects.

#### Ambulance Services

Since January 1983 ambulance services have been provided on a unified basis throughout Tasmania under the direction of a Director of Ambulance Services, who is subject to ministerial control. Ambulance services are organised on a regional basis within the southern, northern, and north-western regions of the State, each headed by a Regional Superintendent. Each region has an Ambulance Advisory Council established under the Ambulance Service Act 1982, and there is also a single State-wide Tasmanian Ambulance Service Advisory Council. The funding basis of the ambulance service has altered, with the municipal contribution and the State Government contribution towards the budgeted operating costs of the Ambulance Service being shared equally at 40 per cent of the total cost, with the remaining 20 per cent of funds being generated from fees raised against hospitals for inter-hospital transfers of patients, against the Motor Accidents Insurance Board, and against Workers' Compensation Insurers.

## Royal Flying Doctor Service

This was established in Tasmania in 1960 and has as its purpose the provision of medical and dental services to persons in isolated areas. If the illness or injury is serious, a doctor flies to the patient and if necessary brings him back to hospital. The ambulance services receive the calls, make arrangements to charter aircraft and supply medical equipment. The Commonwealth and State Governments make an annual grant towards operational expenses.

#### **Blood Transfusion Service**

The Australian Red Cross Society operates the blood transfusion service with a joint grant from the State and Commonwealth Governments. The combined grant in 1983-84 was \$603 300.

#### Alcohol and Drug Dependency Board

This Board was established under the Alcohol and Drug Dependency Act 1969; its members are appointed by the Minister for Health from the medical, pharmaceutical, social service, police and legal professions. Its functions are: to keep under review all matters relating to the prevention and treatment of alcohol and drug dependency; to advise on the declaration and control of substances as drugs under the Act; and to act as a board of appeal for applications by patients for discharge from treatment centres.

The treatment and rehabilitation of sufferers of alcohol and drug dependency are handled by the Mental Health Services Commission, the Commission's acute psychiatric units (at Wynyard, Devonport and Launceston), and the Royal Derwent Hospital at New Norfolk. The John Edis Hospital at New Town is devoted to alcohol and drug problems specifically and delivers a comprehensive service.

## Municipal Health Functions

Municipal councils and city corporations possess wide powers and responsibilities in public health. They organise triple antigen immunisation campaigns against diptheria, whooping cough and tetanus, and vaccinations against poliomyelitis, smallpox, rubella and measles. (These are available without charge to children under 17 years.) They control the condemnation of sub-standard dwellings, the disposal of sewage, the provision of garbage and night soil services and the reticulation of water. A medical officer of health, often appointed by two councils, is responsible, among other things, for: inquiring into the causes, origins and distribution of diseases; investigating influences affecting the public health of the district; directing and supervising the municipal health inspectors in the

execution of the *Public Health Act*; inspection of local certificates of notification of infectious disease and direction of control of such disease; reporting the existence of any nuisance; inspection of any animal carcass for sale for human consumption; and inspecting any premises where milk or milk products are produced or stored.

#### Mental Health Services Commission

#### Introduction

Significant advances have been made in the field of clinical psychiatry and in the treatment of mental illness during the past three decades. The development of psychotropic drugs, new therapeutic techniques and improved methods of clinical practice have revolutionised the mental hospital from an institution for the incarceration of lunatics to a modern hospital geared to the care and rehabilitation of the sufferers of psychiatric disorders.

#### Administration

The Mental Health Services Commission was established under the *Mental Health Services Act* 1967, following an interdepartmental investigation into psychiatric services in Tasmania. The Commission comprises three members: a Medical Commissioner, a Clinical Commissioner and an Administrative Commissioner. Since 1 July 1968, the Commission has operated as a statutory authority, completely separate from the Department of Health Services.

The Mental Health Services Commission provides integrated community services and to this end has established acute psychiatric units at Launceston, Wynyard and Latrobe. These regional units are closely linked to the public hospital complexes.

In September 1972, the Commission took over the Tasmanian Chest Hospital at Creek Road, Hobart and re-named the institution the John Edis Hospital. The facilities at this hospital have enabled the services for alcoholism and psychiatric disorders, formerly carried out at Clare House, New Town, to be expanded.

The principal institution under the control of the Commission is the Royal Derwent Hospital.

## Royal Derwent Hospital

The Royal Derwent Hospital (at New Norfolk) is the State's principal centre for the treatment of psychiatric disorders and for caring for the intellectually handicapped. The hospital is divided into sections and patients are allocated to the sections on the basis of their medical diagnosis. The basic division of patients is into those who are psychiatric patients and those who are intellectually handicapped.

#### Other Institutions

'Melrose' is the headquarters of the Commission, providing administrative, personnel and financial services to the various clinics and centres under its control, and liaison with the Government. The Director of Intellectual Handicap Services is also located at Commission headquarters.

Child and Adolescent Psychiatric Unit (New Town) is a centre for children and adolescents with disturbances of behaviour and/or emotions where help is offered to the children and adolescents, their parents and families. The centre also functions in a consultative capacity to allied professionals and organisations and fulfils a teaching role to both professionals and the community.

Community Services South provide a specialist referral system for general practitioners and other health workers in the care of those with mental illness or emotional and behavioural problems. Clients are dealt with on a community or out-patient basis, with referrals to hospital when necessary. Psychiatric assessment, medical treatment, counselling and psychotherapy, using a team approach, are available. A further aim of the service is to promote mental health through community education and liaison with other agencies.

Professional Psychiatric Unit (Royal Hobart Hospital) provides psychiatric assessment and treatment of a spectrum of ambulatory patients not requiring security facilities. A comprehensive range of treatment is available. There is co-operation with other clinics and agencies, and, as an academic unit, it reaches post-graduate and under-graduate medical staff.

Lindsay Miller Clinic is a general psychiatric unit attached to the Launceston General Hospital. It provides acute psychiatric management on an in-patient, day-patient and out-patient basis to the North and North-East. The unit has 16 beds with nursing services being provided by the hospital. Outside the hospital setting, the unit aims for a multi-disciplinary team approach to the community-based treatment of mental illness, which includes not only individual professional/client contact but liaison with local groups and organisations and other professionals.

LANTADD (Launceston and Northern Tasmanian Alcohol and Drug Dependency Service) provides medical assessment and treatment, combined with individual counselling and group work, to deal with alcohol and drug dependency problems and associated problems of living. Beds are provided at the Lindsay Miller Clinic for medical treatment of short duration, while detoxification is managed at the Launceston General Hospital.

Intellectual Handicap Services (North). In the north, services for adults and children of all ages who are intellectually handicapped, although geographically separate, have been administratively amalgamated to reflect the integrated 'whole of life' approach to the needs of intellectually handicapped people.

The Rocherlea Training Centre is the administrative base for services which include centralised day training for adults and respite care for all age groups. About 50 clients attend day training regularly; some programs have been relocated into the community to encourage the use of existent community resources and to improve the interaction of the client with the public. Respite care, as in the south, is a service in considerable demand for all age groups, and was used by some 75 families during the 1983-84 financial year.

A new development emanating from Rocherlea has been the community living service. On the basis that the process of normalisation should include a normal living environment — that is, in a house in an ordinary community — a group home was established for four intellectually handicapped adults. This home has functioned well since May 1984. Staff who supervise it are also involved in home support to other clients. The extention of this program in the coming year is being planned; the regular opening of similar group homes is intended in both Launceston and Hobart as the philosophy of normalisation is seen to work.

At Elonera Children's Training Centre, services include individualised day training programs for those up to 16 years of age. Parent involvement is emphasised and the Centre circulates a regular newsletter.

North East Community Team provides assessment and counselling for people with emotional problems, with emphasis on early intervention. This is done through individual casework, group work or community organisation. Clients are dealt with on a community basis with referral to hospital when necessary. A further aim of the service is to promote mental health services through community education and liaison with other agencies.

John Edis Hospital (New Town). This 40 bed hospital provides in-patient, day-patient and out-patient treatment for persons with alcohol/drug dependency through education programs, individual and group counselling and occupational therapy.

Quindalup Day Training Centre and Quindalup Respite Care Centre (New Town). These two Centres provide services for intellectually handicapped children in the south of the State. Pre-school and school-age programs are conducted in the Day Training Centre, with a strong emphasis on individual program design, regular review, and family contact. The management of intellectually handicapped children in the home is often extremely demanding, and family support is a crucial element of the Centre's activity. This support is offered also by the Respite Care Centre, which offers planned short-term and crisis admissions to children so as to provide respite for parents. The service is heavily

utilised, with admission generally exceeding 40 per month. Excessive demand at some periods, for example during school holidays, has stretched resources to their limits.

Forensic Service is concerned principally with persons referred by the Courts, Probation and Parole Services, or by the Prison authorities. A full psychiatric/psychological service is offered.

Wellington Street Clinic offers help to children and adolescents with emotional and/or behavioural problems. Psychotherapy in a family context is used though other forms of treatment are available. Community work includes education, initiation of services and agency co-ordination.

Spencer Psychiatric Clinic (North-Western General Hospital) is a general hospital psychiatric unit with 17 in-patient beds and out-patient facilities. The unit is recognised as an Alcohol and Drug Dependency Treatment Centre and also provides psychiatric treatment for the whole range of psychiatric disorders.

Community Services North-West (Devon Clinic and Devonport Psychiatric Clinic) This service provides a special referral system for general practitioners and other health workers in care of those with mental illness or emotional and behavioural problems. Clients are dealt with on a community or out-patient basis, with referral to hospital when necessary. Psychiatric assessment, medical treatment, counselling and psychotherapy, using a team approach, are available. A further aim of the service is to promote mental health through community education and liaison with other agencies. The facility also provides day centre care for patients selected by the psychiatric team.

#### Summary of Patient/Client Statistics, 1983-84

		In-patients		C	Out-patients/d	lay-patients	
Programs and program	Admis	sions	Disci	harges	Individual	Individual	
components	Individual patients	Total admiss- ions	Total	Average stay (days)	out- patients	day patients	
Psychiatric and Public Hospitals—							
Royal Derwent Hospital	285	361	398	152.1		31	
Royal Hobart Hospital	278	337	336	20.6	649	55	
Launceston General Hospital	292	378	379	14.4	725	29	
North-Western General Hospital	241	347	354	17.1	454	7	
Mersey General Hospital	188	264	267	24.0	76	22	
Total	1 284	1 687	1 734	_	1 904	144	
Services — South				 	808 334 1 142		
ntellectual Handicap Services— Royal Derwent Hospital	46	61	60	474.4			
Alcohol and Drug Dependency Services—							
John Edis Hospital	394	532	528	11.8			
Community services (South)					648	61	
Community services (North)					194		
Total	394	532	528	11.8	842	61	
Forensic					364		

#### Summary of Patient/Client Statistics, 1983-84-continued

		In-patier	nts	C	Out-patients/d	ay-patients
Programs and program		1dmissions	Disch	arges	Individual	Individual
components	Individ patie		Total	Average stay (days)	out- patients	day patients
Community Psychiatric Services—						
South					814	77
North		• ••	••	••	132	
North-West			••		795	49
Derwent Valley					110	
Total					1 851	126
Total	1 724	2 280	2 322		6 103	331
	Respi	te care		Da	y training	
Intellectual Handicap Services	Individual clients	Total admissions	Individi client:		Total contacts	Average contacts
Quindalup	60	488	3	5	2 236	63.8
Elonera			3	4	2 788	82.0
Rocherlea	76	245	6	3	10 230	162.3
Total	136	733	13	2	15 254	114.7

## Commonwealth Department of Health

#### General

The Department is concerned in Tasmania with the administration of the Quarantine Act 1908, the National Health Act 1953, the Health Insurance Act 1973 and the Nursing Homes Assistance Act 1974 and the control and maintenance of Pathology and National Acoustic Laboratories at Hobart and Launceston.

#### **Ouarantine**

Quarantine guards against the importation from overseas of human, animal and plant infection. By arrangement, plant and animal quarantine is operated by the State Department of Agriculture. In general, interstate movements of animals and plants are left to the States, unless Commonwealth action is necessary for the protection of a State.

#### Health Program Grants

These grants, under the *Health Insurance Act*, are generally paid to organisations providing services through medical and para-medical personnel remunerated on a salaried or sessional basis. An approved organisation is entitled to be paid an amount equal to the cost incurred by the organisation in providing the approved health service, including such part of the management expenses of the organisation as the Minister considers attributable to the provision of the health service.

#### Domiciliary Nursing Care Benefit

This benefit of \$42.00 per fortnight is designed to help meet the cost of home nursing and other professional care for people who are chronically ill but being cared for in their homes. It is payable to any person who provides continuous care for a patient in a private home provided the home is the usual residence of both the person and the patient and provided the patient meets certain medical criteria. The main eligibility rules are:

- patients must be 16 years of age or more;
- patients must have an official certificate from their doctor stating that because
  of infirmity or illness, disease, incapacity or disability they have a
  continuing need for nursing care as would qualify him/her for admission

to a nursing home and that such an admission would be necessary if it were not for the home care provided; and

• patients must be receiving care by a registered nurse on an approved basis.

#### Nursing Home Benefits

The Nursing Homes Assistance Act came into effect from 1 January 1975. Under this Act, religious and charitable nursing homes can elect to come under the provisions of that legislation which relate to 'deficit financing' of such nursing homes. These nursing homes submit a budget showing estimated operating receipts and payments and the estimated end-of-year deficit. The Commonwealth Government provides monthly advances against the anticipated deficit and a final settlement based on the actual deficit revealed in the audited end-of-year accounts. The Act prescribes a fee to be charged to patients (\$89.25 per week with effect from 1 November 1984) and this may be varied by legislation. Arrangements exist for waiver or part-waiver of the prescribed fee in certain circumstances.

Those religious and charitable nursing homes which have not elected to come under provisions of the *Nursing Homes Assistance Act*, together with private gain nursing homes and government nursing homes, continue under the provisions of the *National Health Act*.

The benefits and patient contribution to fees in these nursing homes are given in the following table:

Nursing Home Benefit	Rates (National	Health	Act),	Tasmania
	(\$ Per Week)			

Particulars	Ordinary care patients	Intensive care patients
Benefits from 1 November 1984 (a)	194.60 89.25	236.60 89.25
Total fee (b)	283.85	325.85

<sup>(</sup>a) Payable by Commonwealth Government irrespective of whether the patient has private health insurance.

Private gain nursing homes and those religious and charitable nursing homes, which have not elected to come under the provisions of the *Nursing Homes Assistance Act*, accept a fee control system and require departmental approval to vary their prescribed fees. The prescribed fees may differ between nursing homes because of the 'base' figure accepted for each nursing home when fees control was introduced on 1 January 1973 and because of continuing different costs between such homes. An independent fees review committee exists in each State to determine any appeals made by nursing homes against departmental decisions on fees.

#### Pharmaceutical Benefits

The Pharmaceutical Benefits Scheme, under the provisions of the *National Health Act*, provides a comprehensive range of drugs and medicinal preparations which may be prescribed by registered medical practitioners for persons receiving medical treatment in Australia. There is also a limited range of pharmaceutical benefits which may be prescribed by approved dental practitioners for dental treatment of their patients. Under the pharmaceutical benefits scheme, basic rate pensioners receive their pharmaceutical requirements free of charge; non-pensioner patients are required to pay a patient contribution fee of \$4.00 (reviewable) for each benefit item received. Concessional beneficiaries are required to pay a patient contribution fee of \$2.00 (reviewable) for each benefit item received. National Health prescriptions are valid for six months from the date they are written.

<sup>(</sup>b) 'Total fees' are the standard fees as determined by the Government at 1 November 1984. If fees actually charged are: less than the standard fee, the benefit shown above, is reduced by the difference; or greater than the standard fee, the patient's share, shown above, is increased by the difference.

## Pathology Laboratories

These laboratories, situated in Hobart and Launceston, provide diagnostic services for medical practitioners and hospitals. A general clinical pathology service is offered, and the laboratories also perform serological services for the Red Cross Blood Transfusion Centre

National Acoustic Laboratory

The National Acoustic Laboratories (NAL) provide audiological services through Hearing Centres located in Hobart and Launceston and by regular visits to larger country centres.

Hearing Centre services fall into two broad categories: audiological assessment and audiological rehabilitation. The former involves evaluation and definition of an individual's auditory capacity. The latter involves primarily the improvement of the individual's auditory function through the fitting of an appropriate hearing aid, supplemented by additional rehabilitative measures. The service is planned to allow adequate follow-up of persons provided with hearing aids, including periodic review and replacement of aids, as hearing needs change or new technology becomes available.

NAL Hearing Centres are staffed by audiologists, university graduates, who specialise in the assessment of auditory function and non-medical rehabilitation of auditory disorders. Each Centre also engages at least one part-time Ear, Nose and Throat specialist as a consultant.

Two main types of 'Calaid' hearing aids are provided by the Laboratory: behind-the-ear and body aids. Each type is made in a number of ranges of power to suit differing degrees of deafness, and each has been designed to allow ready acoustic and electronic modification of performance characteristics. This enables selective fitting for virtually every type of hearing loss, using a selection procedure developed by the Laboratory. In addition to Calaids, a limited number of imported aids are utilised in those cases where the particular acoustic qualities of such aids are required. Supplementary wireless aids are supplied to hearing impaired children who have special educational requirements.

NAL services, which are free to eligible persons, include supply and maintenance of hearing aids as well as provision of batteries. At present, those eligible for full services include children (up to 21 years), Social Security beneficiaries (and dependants) who have appropriate entitlements, Veterans' Affairs beneficiaries (and dependants), Armed Forces personnel and Commonwealth Compensation beneficiaries. Referral, except in the case of children, has to be by an appropriate medical practitioner.

Isolated Patients, Travel and Accommodation Assistance Scheme

This scheme, which was introduced on 1 October 1978, operates under the *National Health Act* and in general provides financial assistance to patients, and escorts or attendants where necessary, who need to travel more than 200 kilometres from their home to obtain specialist medical treatment or services. Benefits include the refund of travel costs less \$20.00 per claim and an accommodation allowance of up to a maximum of \$20.00 a night per person for overnight stays due to transport limitations and/or medical considerations.

#### HEALTH INSURANCE

Between 1 September 1981 and 31 January 1984 the health insurance arrangements operated as follows:

All patients other than Pensioner Health Benefit Card-holders, Health Benefit Card-holders (Sickness Beneficiaries) and Health Care Card-holders (for people in special need) were required to meet any medical and/or hospital costs incurred. This could be done either by taking out insurance with a registered health benefit organisation or from their own pockets. A taxation rebate was introduced for contributions paid to a registered health benefits organisation to the extent of contributions paid for cover at the basic medical and/or hospital table levels. That rebate ceased on 30 June 1983.

#### Medical Benefits

Registered health benefit organisations offered a basic medical benefits table which provided coverage for 85 per cent of the schedule fee with a maximum payment by the patient of \$10.00 for any one service where the doctor charged the schedule fee. Organisations also offered supplementary and ancillary benefits. Commonwealth medical benefit, at the rate of 30 per cent of the schedule fee for each service listed in the medical benefits schedule, was paid by the registered benefit organisation and formed part of the benefit received towards the cost of medical services.

#### Hospital Benefits

Registered health benefit organisations also provided a basic hospital benefits table covering accommodation in shared rooms of public hospitals with doctor of choice (which was available at Royal Hobart Hospital and both Queen Alexandra and Queen Victoria Maternity Hospitals) or with doctors engaged by the hospital. In this latter case, the professional service fee of \$60.00 per day was also covered by the basic table. All public hospitals raised accounts for out-patient services and these fees are also covered. The organisations also offered supplementary benefits which provided additional benefit for private hospital accommodation.

Pensioner Health Benefit Card-holders Health Benefit Card-holders Health Care Card-holders

Persons who held one of the above-named cards which were issued by the Department of Social Security did not have to pay for public hospital accommodation nor treatment for medical services where their doctor bulk-billed. If their doctor did not bulk-bill, the person could register with one of the registered health benefit organisations (free) and the accounts then attracted a Commonwealth Benefit of 85 per cent of the schedule fee with a maximum payment by the patient of \$5.00 for any one service where the schedule fee had been charged.

## Other Services

The arrangements outlined above for medical benefits also applied to consultations with optometrists, certain specialised oral surgery carried out in hospital operating theatres, and to orthodontic and related treatment for young people suffering from cleft lip and palate conditions where such services were covered by the Government medical benefit schedules.

#### Long Stay Hospital Patients

To be classified as a 'nursing-home type patient' patients must have been hospitalised for a continuous period exceeding 60 days unless a medical practitioner certifies that the patient is, and would continue to be for a specified period, in need of acute care, professional attention for an acute phase of the patient's condition, active rehabilitation or continued management, for medical reasons, as an in-patient. 'Nursing-home type patients' were required to make a specified 'patient contribution' towards the cost of their hospitalisation and were not able to cover that contribution through insurance.

#### Medicare

On 1 February 1984 Medicare came into operation. This scheme covers all Australians and provides the following benefits:

Medical Services: for these services Medicare pays a benefit of 85 per cent of the schedule fee with a maximum contribution of \$10 per service. If the doctor chooses to direct bill Medicare, the patient will not be required to meet any cost. No private insurance is available to meet the 15 per cent gap. To protect persons suffering from chronic illness or major episodes of severe illness once the patient contribution has accumulated to \$150 in one year, Medicare will pay a benefit of 100 per cent of the schedule fee for the remainder of that year.

Hospital Benefits: standard ward accommodation and treatment by hospital doctors is provided at no charge in the public hospital system. Out-patients services at public hospitals are also provided at no charge.

The arrangements outlined above for medical benefits also apply to consultations with optometrists, certain specialised oral surgery carried out in hospital operating theatres and to orthodontic and related treatment for young people suffering from cleft lip and palate conditions where such services are covered by the medical benefit schedules.

The Medicare system is financed by a 1 per cent levy on all Australian residents whose income exceeds the following levels:

• single people earning above \$7 110 per annum; or

• married couples and sole parents with one child with incomes above \$11 803 per annum. The exemption level increased by \$1 330 per year for each dependent child.

The maximum levy payable has been set at \$750 per year.

Exemptions from the levy are provided for: blind pensioners, certain pensioners eligible for treatment from the Department of Veterans' Affairs, and migrants and refugees for the first six months of residence.

#### Long Stay Hospital Patients

These arrangements have been modified from 1 February 1984 to the effect that a patient who has been continuously hospitalised for 35 days (periods of hospitalisation with a break of less than 7 days between such periods, are counted as continuous hospitalisation) is classified as a nursing home type patient unless a medical practitioner has certified that the patient is in need of acute care. A review procedure has been set up to review the effect of a certificate.

#### Private Insurance

Private insurance is available for those people wanting a choice of doctor in the public hospital system, assistance to meet accounts for accommodation in private hospitals, and to cover ancillary services, such as physiotherapy, dental and optometrical appliances.

Registered health benefit organisations offer a basic private hospital table to cover the \$80 per day charged to those persons being treated by their choice of doctor in a public hospital. The table also pays \$80, \$100 or \$120 per day to help meet charges for accommodation in private hospitals. The organisations also offer supplementary hospital benefits which provide additional cover for private hospital accommodation, and accommodation in a private room of a public hospital.

Medical ancillary benefits continue to be offered by organisations. These benefits cover such areas as physiotherapy, chiropractic and dental treatment, optometrical and dental appliances and prostheses.

#### Further References

ABS Publications

Year Book Australia (1301.0), annual.

Other Publications

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DEPARTMENT OF HEALTH SERVICES. Report for the Year. (Government Printer, Hobart.) DEPARTMENT OF SOCIAL SECURITY. Annual Report. (AGPS, Canberra.) DEPARTMENT OF SOCIAL WELFARE. Report for the Year. (Government Printer, Hobart.)

# **CHAPTER 8**

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## Chapter 8

## LAW, ORDER AND PUBLIC SAFETY

#### LAW IN TASMANIA

Following British colonisation of Van Diemen's Land from 1803, a system of law and courts based on the Imperial system was established in the colony. A description of the origin and evolution of Tasmanian law is included in the 1976 and earlier editions of the Year Book. This section describes the present system of law operating in the State.

#### The Criminal Law of Tasmania

In 1924 the Criminal Code Act, which codified and brought together the criminal law of Tasmania, was passed. This Act embodied the State's criminal law in the form of a code which was made a schedule to the 1924 legislation.

The Criminal Code Amendment Act 1984 repealed Section 49 of the Criminal Code and replaced it with a revised provision also dealing with self defence which states:

'In any case in which it is lawful for a person to use force of any degree for the purpose of defending himself against assault it is lawful for any other person, acting in good faith in the aid of that person, to use a like degree of force for the purpose of defending him.'

#### **Juries**

Tasmanian legislation regulating juries seems to have been first passed in 1830 although, for many years before that date, the introduction of the British system of trial by jury in civil and criminal cases had been persistently urged in the colony. The *Hobart Town Gazette* shows that juries had been employed in the colony for the trial of criminal cases from the establishment of the Supreme Court in 1824. Juries remain as the tribunal for trying indictable criminal cases and there is limited right to a jury in civil actions, although in 1935 they were abolished for the purpose of trying motor accident cases.

Although the Tasmanian jury system was based on the English system it has, since 1934, embodied the principle of allowing *majority* decisions in certain circumstances instead of requiring the *unanimous* decisions once characteristic of jury usage in England and most other countries.

Civil cases have a seven-member jury and, if after three hours deliberation a seven-nil decision cannot be reached, a five-two decision is accepted. If the minimum five-two decision cannot be reached after four hours, the jury may be discharged.

In criminal cases, similar principles apply except that a 10-2 decision is accepted in lieu of 12-nil after stipulated periods of deliberation. In the case of murder, 12-nil is necessary to convict, but 10-2 can bring in a verdict of not guilty, or not guilty of murder but guilty of a lesser crime.

#### The Present Law Court System

#### Courts of Petty Sessions

For particular municipalities in the State, there is a Court of Petty Sessions. The Court is constituted by a magistrate (who must have been a legal practitioner or barrister for not less than five years) or by two or more lay justices. In major centres of population,

a Court sits regularly and, in smaller centres, a Court sits less frequently or is convened as occasion requires.

A Court of Petty Sessions has jurisdiction over all summary offences and also over certain indictable offences at the option of the defendant. Under the Justices Act 1959, a defendant may choose summary trial in the Court of Petty Sessions when charged with the following crimes: (i) Escape or rescue; facilitating escape of a prisoner or harbouring an offender; assisting escape of a criminal lunatic; rescuing goods legally seized; making a false declaration (or statement). (ii) Stealing; killing an animal with intent to steal; unlawfully branding an animal; obtaining goods by false pretence; cheating; fraud in respect of payment for work; receiving stolen property. (In all these cases the value of the property concerned must exceed \$500 but not \$5000. If the value does not exceed \$500 the defendant will be tried summarily. If it exceeds \$5000 he will be committed for trial in the Supreme Court). (iii) Breaking into a building other than a dwelling-house. (It is necessary for the defendant to be committed to the Supreme Court for trial where it is alleged that in the commission of the offence: property to the value of more than \$5 000 has been stolen; violence has been used or offered to any person in or about the building; the person had in his possession a gun, pistol, dagger, cosh, or other offensive weapon; explosives were used; or the defendant intended to commit a crime other than stealing). (iv) Forgery; uttering. (The complaint must be for an offence in respect of a cheque for not more than \$5 000.)

The Court of Petty Sessions, when constituted by a magistrate, now has the jurisdiction, after the passage of the *Police Offences Amendment Act* 1984, to determine questions of title to land or interests in land or in respect of bankruptcy or execution of process when those matters arise before such courts in respect of criminal proceedings then being heard.

## Courts of Request

These are constituted as courts with civil jurisdiction for particular municipalities in accordance with the authority given by the Local Courts Act 1896. Courts are held before a commissioner who is usually a magistrate. The Attorney-General fixes the dates on which these courts sit. Every Court has jurisdiction throughout the State but a plaintiff may have his action struck out if he brings it in a Court other than the Court having jurisdiction, i.e. the Court nearest to which the cause of action arose. In such circumstances the plaintiff may lose costs.

The current jurisdiction of a Court of Requests, which is a court of record, covers all personal actions where the debt or damage claimed does not exceed the maximum amount fixed under the Act. Since 1 November 1966, the sum of \$1 500 has been fixed as the maximum jurisdiction for a Court of Requests in respect of a debt or liquidated sum, and \$1 000 in any other case. Legislation amending the *Local Courts Act* 1896 was passed in 1983 which will, from a date to be proclaimed, increase the jurisdiction of the Court of Requests to \$5 000, and abolish the distinction between liquidated and unliquidated claims in so far as that distinction affected the institution of actions.

The Commissioner alone determines all questions of fact as well as of law and his decision is the judgment of the Court, unless a jury is required. In any action either party may require a jury as of right and there is power for the Commissioner to order that an action be tried by a jury, even though neither party has required it. Law and equity are administered concurrently in the Court and the general principles or practice in the Supreme Court are adopted and applied in cases not expressly provided for in the Act or Rules.

## Courts of General Sessions

Courts of General Sessions, constituted under the *Local Courts Act* 1896, have been progressively discontinued since 1978 in conjunction with the transfer of local government courts to State administration which was completed in August 1980.

## The Supreme Court of Tasmania

The Supreme Court of Tasmania is constituted by the Chief Justice and five Puisne Judges. Regular sittings of the Court are held at Hobart, Launceston and Burnie, although the Court is empowered, subject to the provisions of the Supreme Court Civil Procedure Act 1932, to sit and act at any time and at any place for the exercise of any part of the jurisdiction and business of the Court.

The Court has jurisdiction over all causes, both civil and criminal, except those reserved for the High Court of Australia under the Australian Constitution. It also exercises Federal jurisdiction in matters such as bankruptcy, etc. Its civil jurisdiction extends to all causes of action, whatever the amount involved may be, and its criminal jurisdiction includes the trial of all indictable offences. In civil cases, the Court has power to call in the aid of one or more assessors specially qualified to assist in the trial of the actions, but it is not bound by the opinion or advice of any such assessor.

There is a right of appeal to the Supreme Court of Tasmania from all inferior courts and from many statutory tribunals.

Law and equity are administered concurrently in the Court which is enjoined to grant, either absolutely or on such terms and conditions as seem just, all such remedies to which any of the parties may be entitled so that, as far as possible, all matters in controversy between the parties may be completely and finally determined, and a multiplicity of legal proceedings avoided. The judges, on the recommendation of the Rule Committee, are empowered to make rules regulating the practice and procedure of all proceedings in the Court.

The jurisdiction of the Court is usually exercised by a judge of the Court and from his decision there is a right of appeal to the Full Court of the Supreme Court of Tasmania. A Full Court consists of three or more Judges of the Court. The Full Court is also a Court of Criminal Appeal under the Criminal Code. The latter is a Court to which appeals may be brought by the Crown or by an accused person where an indictable offence is involved. In some cases, there is an appeal as of right but, in other cases, leave is required.

## The High Court of Australia

This Court was created by the Constitution of the Commonwealth of Australia and it has both original and appellate jurisdiction. It is constituted by the Chief Justice of Australia and six other Justices.

Since 1 June 1984 all appeals as of right to the High Court were abolished and no appeal now lies from a State Supreme Court to the High Court except by special leave of the High Court.

Sittings of the High Court of Australia are held in Canberra. Provision is made, when there is sufficient business to warrant convening a sitting of the Court in Hobart, for the Court to travel to Hobart for the sittings.

#### The Federal Court of Australia

The Court created by the Federal Court of Australia Act 1976, is constituted by the Chief Judge and 23 other judges. The Court was created basically to reduce the work of the High Court, so that the High Court could give greater attention to its primary function as the interpreter of the Constitution. Consequently, the Federal Court was invested with original and appellate jurisdiction under a variety of statutes including the Conciliation and Arbitration Act 1904, the Bankruptcy Act 1966, the Trade Practices Act 1974 and the Administrative Appeals Tribunal Act 1975. Sittings of the Court are held in each capital city—there is a District Registry in each.

#### Tribunals

There are many tribunals which are not true courts and the powers and functions of these depend upon the detailed provisions of the particular statute under which they

operate. Certain specialised courts have been created by statute. For example, the Wardens' Court is constituted under the *Mining Act* 1929.

## Coroners' Courts

Coroners are appointed by the Governor and have jurisdiction throughout the State. Under the Coroners Act 1957, a coroner may hold an inquest: (i) concerning the manner of death of any person who has died a violent or unnatural death, who died suddenly without the cause being known, or from 'sudden infant death syndrome' or 'cot death', or who died in a prison, or mental institution; at the direction of the Attorney-General, he may also be required to hold an inquest concerning any death; (ii) concerning the cause of any fire if the Attorney-General has directed, or has approved a request by the owner or insurer of the property; or at the request of the State Fire Authority or the Rural Fires Board.

The coroner usually acts alone in holding an inquest, but either the Attorney-General or the relatives of the deceased may request that a four or six-man jury be empanelled. After considering a post-mortem report the coroner may dispense with an inquest, unless the circumstances of death make an inquest mandatory under the Act.

The duty of the Court is to determine who the deceased was, and the circumstances by which he came to his death. Medical practitioners and other persons may be summoned to give evidence. In the case of the death of an infant in a nursing home, the coroner may also inquire generally into the conditions and running of the institution. On the evidence submitted at the inquest, the coroner can order a person to be committed to the Supreme Court and can grant bail. In the case of murder, a coroner can issue a warrant for apprehension.

#### Children's Courts

A 'child' in this jurisdiction is one under the age of 17 years. The Court before finally disposing of the case, must receive a report from a child welfare officer (the representative of the Director for Community Welfare), unless the Court considers the offence trivial or the Director decides not to provide one. A child's parent has the right to be heard and to examine and cross-examine witnesses, or to be represented by counsel; also a parent can be compelled to attend the hearing if this imposes no unreasonable inconvenience.

In summary proceedings, the Court is compelled not to enter a conviction against a child unless it imposes a sentence of imprisonment or there are special circumstances which indicate that a conviction should be recorded.

Children under 16 years cannot be sentenced to imprisonment and children of 16 years cannot be sentenced for more than two years, in aggregate. Minimum penalties imposed by statute do not apply to children; for those under 14 years the maximum fine is \$20, and for those over 14 years, \$100. The Court may impose a supervision order to bring the child under the guidance of a child welfare officer or, if over 15 years, of a probation officer. Alternatively, the Court may declare the child a ward of the State, placing him under the control of the Director for Community Welfare until his eighteenth birthday, unless released sooner; it may also direct that a ward be committed to an institution. In cases where further investigation appears necessary the Court may issue a remand for an observation order before it makes a final decision. Remands for observation orders are for short periods and usually provide for intensive supervision. (In the case of delinquency the maximum period for such an order is three months.)

Neglected or uncontrolled children are in the Court's jurisdiction. It may make a supervision order; an interim order (similar to a remand for observation order, the effect being to defer the transfer of guardianship until it is apparent that there is no suitable alternative); or impose wardship or bind the parents over to provide proper care and control, and comply with other directions. If parents have contributed to a child's offence by failing to control the child they may also be charged, convicted, fined, ordered to pay for damage and obliged to enter into a recognisance for the good behaviour of the child for up to 12 months.

Unlike a Children's Court, the Supreme Court is in no way inhibited in imposing a penalty on a child. In addition to its ordinary sentencing powers, it may make supervision or wardship orders, and commit a child to an institution. If a child is sentenced to imprisonment, the responsible Minister may direct that the sentence be served in a place other than a gaol.

Statistics showing numbers of children appearing before Children's Courts by age, sex and alleged offence are given in the next two tables:

Children Appearing Before Children's Courts, Tasmania(a), 1982-83 Classified by Age and Sex

					Age (b) (in	years)			_
	Sex	Under 7	7-8	9-10	11-12	13-14	15-16	Not Stated	Total
Boys Girls		7 6	1	18 3	88 18	336 117	1 103 262	15	1 568 406
	Total	13	1	21	106	453	1 365	15	1 974

<sup>(</sup>a) A child appearing twice or more before the Courts will appear twice or more in the table.

Children Appearing Before Children's Courts, Tasmania(a)
Classified by Offence

Offence alleged	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83
Relatively serious offences—						
Damage to property	160	106	77	98	95	128
Breaking, entering and stealing	436	300	349	257	323	269
Stealing	619	391	455	428	438	427
Receiving	18	19	20	20	24	14
Illegal use of vehicles	207	131	91	91	62	63
Offences involving fraud	2	_	6	2	3	6
Sex offences	17	14	6	2	_	_
Other offences against the person	97	28	49	40	58	59
Offences against decency	18	14	4	45	35	26
Total	1 574	1 003	1 057	983	1 038	992
Other offences—						
Disorderly conduct	46	117	7	3	58	35
Traffic offences	508	498	364	358	368	393
Breaches of—Licensing laws	439	362	217	384	540	377
By-Laws	5	6	107		1	3
Firearms offences	29	33	19	22	28	27
Gaming	2	11	1	5	25	8
Trespass	14	13	15	26	138	24
Other	81	9	15	91	80	63
Total	1 124	1 049	745	889	1 238	930
Complaints under Child Welfare Act—						
Appearing as—Uncontrolled	20	12	26			_
Neglected	176	57	67	72	38	51
Breaches of supervision	8	13	14	3	3	i
Total	204	82	107	75	41	52
Total, all offences	2 902	2 134	1 909	1 947	2 317	1 974

<sup>(</sup>a) A child appearing twice or more before the courts will appear twice or more in the table.

<sup>(</sup>b) Ages are at time of court hearing, not at time of offence.

In the preceding table, the figures relate to actual prosecutions. Where a report concerned multiple offences, the apparently more serious one has been listed. However, a child may be included more than once if more than one report has been made.

The following table shows the orders made by the courts as a result of these offences:

Orders Made By Children's Courts 1982-83 (a)	Orders	Made By	Children's	Courts	1982-83	(a
--	--------	---------	------------	--------	---------	----

Outcome	Boys	Girls	Total
Admonished and discharged	640	242	882
Conviction recorded	52	7	59
Declared ward	24	9	33
Declared ward and committed to		-	
institution	5		5
Fine	263	45	308
Good behaviour bond	71	13	84
Motor vehicle licence disqualification	66		66
Probation	57	9	66
Sentenced to imprisonment	9		9
Supervision CW Act	195	35	230
Unresolved at date of counting	194	34	228
Work orders	10		10
Other	133	37	170
Total	1 719	431	2 150

<sup>(</sup>a) Excludes complaints under the Child Welfare Act.

#### Bankruptcy

The Bankruptcy Act 1966, an Act of the Federal Parliament, gives effect to two main principles of bankruptcy law; firstly, that when a person is unable to pay his debts or is otherwise in financial difficulties, then his assets or property, with limited exceptions, should be disposed of and the proceeds used to pay the creditors in proportion to the amounts owed to them; and secondly, that the debtor should be released from the burden of his debts and be enabled to make a fresh start by obtaining a discharge from bankruptcy.

Under the Act, a person unable to meet his debts may voluntarily present to the Registrar in Bankruptcy a petition against himself and thereby become bankrupt. Alternatively, a creditor may petition the Court for the sequestration of a debtor's estate where the debt is not less than \$1 000. When a debtor becomes bankrupt by either of these ways his property, and any after acquired property, vests in the trustee of his estate.

A person becoming bankrupt under the Act may be automatically discharged from bankruptcy after the expiration of three years (Section 149) unless discharged earlier by the Court. The Registrar or trustee, or a creditor with the leave of the Court, may lodge an objection to this type of discharge. If it is not withdrawn the debtor must apply to the Court under Section 150 if he desires to be discharged. However, an objection will automatically lapse five years from the date of bankruptcy.

A debtor may avoid bankruptcy in some circumstances by authorising a registered trustee or a solicitor to call a meeting of his creditors to make arrangements for the payment of his debts that are acceptable to the creditors. The debtor's property is controlled by the trustee until the creditors resolve otherwise, or the court orders otherwise, or a deed of assignment or arrangement is executed, or a composition is accepted, or the debtor dies or becomes bankrupt.

The Commonwealth Functions (Statutes Review) Act 1981 substantially amended the Bankruptcy Act 1966. The major amendment provides for a private registered trustee to administer the estate of a debtor made bankrupt on either his own or a creditor's petition, instead of the Official Trustee, unless the Court is satisfied either that the value

of the debtor's estate is less than \$10 000, or that the petitioning debtor or creditor has been unable to obtain the consent of a registered trustee to administer the estate. If the Court is satisfied as to either of these two criteria, the estate is then administered by the Official Trustee.

Particulars	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83
Bankruptcies and orders for administra-						
tion of deceased debtors' estates—						
Number	148	223	267	287	294	295
Liabilities \$'000	1 607	2 222	3 756	5 012	4 213	5 207
Assets	541	727	2 248	1 329	664	646
Deeds of assignment, arrangement, com-						
position and schemes—						
Number	8	13	22	6	17	14
Liabilities\$'000	386	1 048	2 202	637	1 475	2.518
Assets \$'000	304	594	800	343	931	817
Assets \$ 000	304	374	800	343	731	017
Total—						
Number	156	236	289	293	311	309
Liabilities\$'000	1 993	3 270	5 958	5 649	5 688	7 725
Assets\$'000	845	1 321	3 048	1 672	1 595	1 463
Assets \$ 000	043	1 321	3 040	10/2	1 393	1 403

#### The Licensing Board of Tasmania

On 10 August 1977 the *Licensing Act* 1976 was proclaimed and it heralded a new era in licensing for Tasmania making the State one of the trend setters in liquor licensing, along with the ACT which has similar legislation. The control of licensing was vested in the Licensing Board of Tasmania.

The Board, appointed by the Governor, comprises a Chairman and two members, (one of whom must be a legal practitioner or barrister) and a deputy member (who must be a legal practitioner or barrister) who may act as Chairman or member as the need arises.

The regulation of licensing is not new or unique to Tasmania. All States and Territories and most countries have a system of licensing to ensure that the public can enjoy liquor in pleasant surroundings and in an atmosphere of conviviality. There are of course problem areas and the *Licensing Act* provides for any person to lodge complaints in relation to any matters of concern, e.g. noise, behaviour of patrons, etc.

The Board has set standards in respect of all licensed establishments and inspections are carried out at least once a year by a Licensing Inspector, a Health Officer and a Fire Protection Officer.

The Administrator for the Board is the Commissioner for Licensing. A Chief Inspector of Licensed Establishments and Inspectors are appointed under the Act.

The following licences may be granted under the Act, namely:

General licences—issued in respect of hotels which must provide for the sale of liquor for consumption both on and off the premises;

On licences—issued in respect of restaurants which provide for the sale of liquor for consumption on the premises only:

Club licences—issued in respect of sporting clubs, RSL clubs etc. authorising the sale of liquor at licensed clubs;

Off licences—issued in respect of wholesale liquor outlets for the sale of liquor in quantities of nine litres or more for consumption off the premises;

Special wine producer's licence—issued in respect of vineyards to sell their own product and where the Board approves, that of other Tasmanian wine producers.

General, On and Off licences may be issued on limitations relating to the kinds of liquor that may be sold and the classes or descriptions of persons to whom liquor may be sold.

Limited licences enable the sale of liquor, for example, on cruise launches, at convention centres and tourist attractions.

The following permits are provided to assist unlicensed organisations:

Occasional permits—to genuine clubs, associations or societies for a social function (limit one per calendar month);

Public event permit—for public sports such as football, cricket, as well as shows, regattas, etc;

Unlicensed club permits—issued on an annual basis to qualifying sporting clubs authorising the sale of liquor during limited hours on a weekly basis.

The following table shows the number of operative licences as at 31 October 1984:

General	Limited General	On	Limited On	Club	Off	Limited Off	Total (a)
289	2	100	49	194	41	3	688

<sup>(</sup>a) Includes 10 special wine producers' licences.

#### **PRISONS**

#### General

The establishment, regulation and conduct of prisons and the custody of prisoners in Tasmania are provided for under the *Prison Act* 1977 which repealed the *Prison Acts* 1868 and 1908. Provision is made for the appointment, by the Governor, of a Controller of Prisons who is responsible for the supervision of prisons, including the initiation and implementation of correctional programs for prisoners and staff training schemes.

Every two years, two appointments are made to the position of Official Visitor to each institution. They visit the prison at least once per month to examine the treatment, behaviour and condition of prisoners, and the condition of the prison.

The main prison in Tasmania is at Risdon near Hobart which has, as an outstation, the Prison Farm at Hayes in the Derwent Valley. The Launceston Prison functioned as a holding centre for prisoners from the northern districts of the State prior to their transfer to Risdon. During 1977-78 that prison was abandoned and the prisoners were transferred to the new Police Headquarters building. Since then, the Police Department have taken over the financial responsibility for the operation and control of remandees in Launceston.

The following table shows Prisons Department expenditure from Consolidated Revenue:

Prisons Department:	Expenditure	From	Consolidated	Revenue,	Tasmania
	(	\$'000)			

	(4				
Particulars	1978-79	1979-80	1980-81	1981-82	1982-83
Total expenditure Net receipts (a)	3 510 182	4 020 164	4 640 131	5 291 171	5 377 362
Net expenditure	3 328	3 856	4 509	5 120	5 015

<sup>(</sup>a) From prison industry and gaol farm activities described later in the text.

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## Capital Punishment

The death sentence has not been carried out in Tasmania since 1946, but judges pronounced the sentence from time to time until 1968. In October 1968, the Attorney-General introduced a bill to abolish capital punishment and this was passed by the Parliament in December of that year.

## Prisoners Received and Discharged

In 1982-83, 1 022 male and 213 female prisoners were received into HM Prison, Risdon. In that period 1 055 male and 212 female prisoners were discharged. At 30 June 1983 there were 200 male and 5 female prisoners in custody. The figures include persons held on remand. The number of convicted prisoners received during 1982-83 was 565 males and 27 females.

#### Prisoners' Offences

The following table shows the offences for which convicted prisoners were received:

Offences (a) for Which Convicted Prisoners Were Received into Gaol in Tasmania

	198	81-82		1982-83				
- -	Per	rsons			Per	sons		
Offence for which convicted	Number	Propor- tion of total	Males	Females	Number	Propor- tion of total		
Offences against the person—								
Common assault	44	2.00	59	6	65	2.33		
Assault police	13	0.59	20	2	22	0.79		
Indecent assault	21	0.95	24	_	24	0.86		
Other	36	1.64	25	_	25	0.89		
Total	114	5.18	128	8	136	4.87		
Offences against property—								
Stealing	533	24.23	486	591	1 077	38.55		
Burglary and breaking offences	396	18.00	343	29	372	13.31		
Steal a motor vehicle	84	3.82	71	1	72	2.57		
Damage to property	40	1.82	39	4	43	1.54		
Obtain goods by false pretences	182	8.27	178	. 22	200	7.16		
Forgery, uttering and currency offences	74	3.36	89	36	125	4.47		
Other	129	5.86	88	13	101	3.61		
Total	1 438	65.36	1 294	696	1 990	71.22		
Offences against good order—								
Breach of probation order	25	1.14	32	1	33	1.18		
		2.82	7 <b>4</b>	1	74	2.65		
Breach of suspended sentence	62			_				
Breach of bail	28	1.27	16		16	0.57		
Breach of work orders	28	1.27	20	_	20	0.72		
Non-payment of fines	86	3.91	132	2	134	4.80		
Other	_ 78	3.55	19	11	30	1.07		
Total	307	13.95	293	14	307	11.00		
Traffic offences—		•						
Drive whilst licence disqualified	171	7.77	170	_	170	6.08		
Dangerous driving	16	0.73	12	_	12	r0.43		
Exceed .08 and .05 per cent	89	4.05	92	1	93	3.32		
Driving under influence	20	0.91	14	_	14	0.50		
Other	25	1.14	44	_	44	1.57		
Total	321	14.59	332	1	333	11.92		
Offences against the Poisons Act 1971	20	0.91	28		28	1.00		
Grand Total	2 200	100.00	2 075	719	2 794	100.00		

<sup>(</sup>a) The number of offences exceeds the number of prisoners received since some prisoners were convicted of multiple offences.

The next table classifies convicted prisoners according to the number of their previous convictions:

Convicted Prisoners Received into Gaol in Tasmania, 1982-83, According to Number of Previous Convictions (a)

Prisoners	Λ				
	Nil	One	Two	Three or more	Total
Number received	267 45.1	120 20.3	47 7.9	158 26.7	592 100.0

<sup>(</sup>a) Previous convictions may not necessarily have involved imprisonment.

#### Age of Prisoners

Young offenders account for a high proportion of receptions. The proportion of convicted male prisoners under 25 years was: 63 per cent in 1978-79; 60 per cent in 1979-80; 57 per cent in 1980-81; 54 per cent in 1981-82 and 52 per cent in 1982-83. The following table shows the age of convicted prisoners admitted to prison:

Ages of Convicted Prisoners Received into Gaol in Tasmania, 1982-83

Sex	Age group (in years)								
	16-17	18-19	20-24	25-29	30-39	40-49	50-59	60 and over	Total
MalesFemales	36 4	85 4	171 4	110 1	86 7	44 6	24 1	9	565 27
Total	40	89	175	111	93	50	25	9	592

#### Parole and Remission of Sentences

Good conduct remissions of up to one third of the sentence for prisoners sentenced to over three months may be granted by the Controller of Prisons.

On 31 March 1976, the Parole Act 1975 was brought into effect by proclamation. This Act repealed the Indeterminate Sentences Act and provided machinery for the appointment of a three-member Board to deal with the granting of parole to prisoners who had served six months or one third of their sentence, whichever was the greater. It also provided for the Board to make recommendations in relation to the release of prisoners who were serving life sentences or who were dangerous criminals.

#### Risdon Prison

The Risdon Prison, with provision for 333 prisoners, was opened in November 1960. Male prisoners were then transferred from the old Hobart Gaol and, in June 1963, the Female Prison, the first entirely separate prison for women to be built in the State, was opened on the Risdon site. The following table shows the daily average and highest number of prisoners at Risdon Prison over a six-year period:

Number of Prisoners, Risdon Prison (a)

Prisoners	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83
Maximum number Daily average	269	343	309	269	281	400
	241	306	280	249	246	229

#### (a) Includes Hayes Prison Farm.

The Risdon Prison incorporates workshops which serve as a basis for vocational and trade training in such subjects as woodworking, tailoring, sheet metal working, laundry

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and breadmaking. Educational services include: instruction during working hours for illiterate and semi-literate prisoners; private study during evenings in general academic subjects to Secondary Schools Certificate standard; correspondence courses in University, School Certificate, Higher School Certificate and various technical and commercial subjects; tuition in English for migrants; and training in art and allied subjects. A classification committee interviews all prisoners on admission and decides on each individual's training program.

Groups meet regularly for woodcarving, art, pottery, toy making and chess. Feature and documentary films are screened fortnightly. The Prison Debating Society debates regularly against outside teams. The Education Section publishes a prison magazine periodically. A comprehensive sports program is conducted including athletics, gymnastics and competitions in cricket, volleyball, basketball and football.

The State Library of Tasmania helps with the Prison library, providing a generous supply of books on a rotational basis, to supplement the stock of books owned by the Department. Over 5 000 volumes are immediately available for selection and prisoners may order books of special interest from the State Library System. The Prison library has been designed to develop the library atmosphere. Some 1 100 books are borrowed weekly from the library, all records being kept by prisoner librarians who receive advice from State Library officers.

A new security hospital was completed in 1978 to cater for both the physically ill prisoners and those suffering psychiatric disorders. The unit will accommodate up to 28 bed patients. Daily medical parades are conducted in the hospital for prisoners requiring out-patient type treatment. The building has a fully equipped dental surgery, treatment rooms, physiotherapy and occupational therapy rooms as well as a dispensary and accommodation for medical and para-medical staff.

Prison industries produce articles for government departments and institutions. The following table shows the receipts for prison industries over a six-year period. A laundry installed in 1963 contributes to receipts from sales and services but the amounts are not a true indication of value to the Government, as laundry and other services are provided at a nominal figure for hospitals and other government institutions.

Prison Suspense	Account	(Prison	Industries),	Tasmania
		(\$)		

Particulars	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83
Receipts (a)	247 946	285 473	318 879	397 826	456 739	577 565
	30 632	63 658	94 728	77 231	99 294	80 656

<sup>(</sup>a) Maintenance and material charges are met from receipts, the balance being paid to Consolidated Revenue in the following year.

#### Hayes Prison Farm

The Prison Farm at Hayes ('Kilderry') is an outstation of the Risdon Prison. It is used to prepare men for a normal way of life through operation of the honour system. Up to 70 prisoners who are regarded as being worthy of trust, regardless of their age, length of sentence or type of offence, are held there.

The following table shows the receipts from sale of farm produce and the amounts paid to Consolidated Revenue over a six-year period:

#### Prison Farm Suspense Account, Tasmania

		( <b>4</b> )				
Particulars	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83
Receipts (a) Paid to Consolidated Revenue	224 858 55 042	255 277 33 865	293 098 87 251	316 058 70 000	337 296 31 680	355 672 90 385

<sup>(</sup>a) Maintenance and material charges are met from receipts, the balance being paid to Consolidated Revenue in the following year.

The 567 hectare property has been developed into a model farm with a great diversity of farming activities. These include: approximately 26 hectares for vegetables; a registered stud of Friesian cattle and Herefords; about 2 000 sheep for wool and fat lambs; a registered herd of Landrace pigs; poultry; cropping of wheat, oats, lucerne and hay; breeding of children's ponies; and hot house cultivation. In May 1969, 125 hectares of land was purchased near New Norfolk. This property, about two kilometres north of the Hayes Prison Farm, functions as an annexe to the Hayes property. During 1970-71 a sawmill was established on the property but this was subsequently destroyed by vandals and was not rebuilt. A further 100 hectares adjacent to this property was purchased during 1974-75. The Royal Derwent Hospital farm of 297 hectares, including the dairy herd and poultry section, was transferred to the Prisons Department during 1971. Whole milk is produced and sold in bulk for general use. Building construction activities and machinery maintenance workshops also provide employment, but this range of prison industries is more limited than at Risdon. Similar educational and recreational facilities to those at Risdon are provided.

A new development has taken place recently in the upgrading of the farm's piggery section. Production has been converted to an intensive system housed in two large sheds. One of these is a sow and litter shed with a capacity for 140 breeding sows, whilst the other is a fattening shed. It is expected that an annual production of approximately 2 500 porkers and replacement stock will be achieved when the system is fully operational. All of the work has been carried out by inmates under the supervision of departmental staff.

## The Probation and Parole Service

The service was established in 1946 and is a division of the Attorney-General's Department. The service is headed by the Chief Probation and Parole Officer, and of the total complement of 60 officers, 43 are probation and parole officers and 17 are clerical and support staff. The head office of the Service is located in Hobart, and there are district offices at Launceston and Burnie and branch offices at Bellerive, Devonport, George Town, Glenorchy and Queenstown. In addition, there are individual probation and parole officers stationed at New Norfolk, Huonville, Ulverstone, Railton and Scottsdale, on a part-time basis.

The main functions of the Service are to provide supervision of persons released from the courts on probation or discharged from prison on probation or parole. Counselling in respect of personal and family matters is offered, as is practical assistance in providing suitable employment wherever possible, and accommodation.

The service undertakes investigations and compiles pre-sentence reports on offenders for the courts and pre-release reports for the Parole Board. In addition, it administers the Work Order Scheme, which was developed and introduced into the Tasmanian criminal justice system in 1972 and which has many benefits for both the offender and the community. From 1 October 1981 work orders became a sentencing option in their own right and ceased to be treated as an alternative to prison.

#### THE TASMANIAN POLICE

### Organisation

The Police Department is headed by the Commissioner of Police who is responsible to the Minister for Police. The Commissioner is assisted by a Deputy Commissioner and two Assistant Commissioners. The highest uniform rank in the Force is that of Chief Superintendent.

The State is divided into three geographical districts with headquarters at Hobart, Launceston and Burnie. The Force also has four specialist branches: Recruitment and Training; Criminal Investigation; Traffic; and Management Services. Each district and branch is under the control of a Superintendent.

## General Policing

General policing is performed by uniform personnel who maintain beat patrols on foot in conjunction with vehicular patrols. Beat police are equipped with radios and are in constant touch with their bases.

## Recruitment and Training

During May 1983, it was decided to discontinue both police cadet training courses and the 24 week adult recruit training courses and introduce a 44 week course to encompass an age group extending from 18 to 33 years of age. Regular in-service courses are conducted from personnel drawn from all ranks and all parts of the State. The Rokeby Academy has administrative, classroom and residential blocks, together with a pistol range, parade ground, library, lecture-theatre, gymnasium and driver training complex. Single-room accommodation is available for 120 students. Classrooms are equipped with audio-visual educational devices, including closed-circuit television.

### Criminal Investigation

While all personnel in the Force have a responsibility for crime detection, the Criminal Investigation Branch personnel specialise in this field—members are divided into specialised sections, including the Drug Bureau and Gaming Squad.

## Traffic Control

The Traffic Control Branch is responsible for enforcing regulations for the Transport Commission and deploys personnel in cars and on motor cycles. It makes use of sophisticated mechanical and electronic devices.

## Management Services

All support services, including the Information Bureau, Scientific Bureau, Planning and Research, Search and Rescue, Transport and Communications Sections, are part of the Management Services Branch.

The Information Bureau maintains a record of previous convictions, property tracing, *modus operandi* of crimes, missing persons and warrants issued, as well as statistics on crimes and offences reported and cleared.

The Scientific Bureau provides specialist services in the fields of: (i) Fingerprinting. It has on file approximately 115 000 fingerprint sets and close liaison is maintained with interstate and overseas sources as well as with the Central Fingerprint Bureau in Sydney. (ii) Photography; duties involve attendance at the scene of major crimes and serious road accidents. Photogrammetric plans are produced. (iii) Ballistic examinations are provided, together with the maintenance of a ballistics library. (iv) Documents and drawing; activities include examination of forged documents and use of 'Photo-fit' equipment to aid in the identification of offenders.

The Planning and Research Section is responsible for studying and improving existing work procedures and making recommendations on planning for future development.

A well equipped Search and Rescue Squad is based at Hobart and is augmented by part-time members from other sections of the Force. Duties include rescues from the bush, mountains, cliffs, caves, at sea and underwater. Valuable support is received from walking, climbing and boating organisations. A powerful motor launch, *Vigilant*, with a sea range of 1 300 kilometres is located at Hobart. Smaller craft are stationed at points around the State coastline and at inland waterways.

The mobility of the Force is provided by a fleet of 400 vehicles, including motor cycles, caravans and mobile headquarters. Two mobile breath analysis units ('booze buses') were introduced during September 1984.

Radio and telex systems operate both intrastate and interstate. Radios are installed in most cars, boats and motor cycles giving a Statewide coverage.

#### Strength of Force

The following table shows the number of police and expenditure:

Tasmania Police: Number and Cost

Particulars	1979-80	1980-81	1981-82	1982-83	1983-84
Police officers (a) no.  Persons per police officer (b) no.  Cost (total expenditure of Police Department)	1 037	1 029	1 041	1 006	1 007
	407	413	411	428	432
Cost per head of mean population \$'000	25 764	28 656	34 986	35 653	35 701
	61.02	67.38	81.64	82.76	82.13

<sup>(</sup>a) At 30 June 1984.

#### **EMERGENCY SERVICES**

#### State Emergency Service

Following a series of discussions at Commonwealth and State levels, the Tasmanian Government, in 1962, decided along with other States, to establish a Civil Defence and Emergency Services Organisation for Tasmania. The Government considered that in addition to its intended role in time of war, the organisation should be organised and trained to assist in combating natural emergency situations. A Director of Civil Defence and Emergency Services was appointed to plan the new organisation and exercise overall control of volunteer units. In April 1975 the title was changed to State Emergency Service in common with other States. Ministerial responsibility for the State Emergency Service is vested in the Minister for Police and Emergency Services. On 12 February 1981 the Service was transferred as an autonomous body to the Police Department. By proclamation of the Governor of Tasmania, the Commissioner of Police on 24 March 1981, was appointed Director of Emergency Services in addition to his office as Commissioner of Police. In the execution of his powers under the Emergency Services Act (Section 18) the Director of Emergency Services delegated all his powers, authorities, functions and duties to the Deputy Director State Emergency Service, except those which provide the instruments to direct Government policy within the Service and to assume command in a declared State of Disaster or Special Emergency within the meaning of the Act. The Deputy Director State Emergency Service is the State contact for all emergency service matters.

#### Legislation

On 1 July 1976, the *Emergency Services Act* came into force. This legislation formally established the State Emergency Service, and set up a counter disaster control structure for dealing with any major emergency or disaster that might affect the State. Under this legislation the State Emergency Service was given wider functions and responsibilities, and the responsibilities of municipalities and other bodies were also set out. Under the Act, when a state of disaster is declared, control is vested in a State Disaster Executive, consisting of the Commissioner of Police, the Director of Emergency Services, and the Ministerial Liaison Officer (Emergency Services).

#### **Functions**

The State Emergency Service has the responsibility for ensuring that the community is adequately prepared to meet any disaster situation that may arise. To this end the Service has the roles of co-ordinating emergency planning, provision and co-ordination of emergency training, and co-ordinating all supporting and ancillary emergency organisations in support of police and other authorities in time of emergency or disaster. The Service is responsible for the oversight and production of Counter Disaster Plans at municipal, regional and State level. To advise the Service in this function, specialist planning committees (incorporating senior representatives from government departments and instrumentalities), volunteer organisations and emergency services have been formed in the fields of transport, communications, medical care, welfare and public information. To ensure adequate communications during periods of disaster, the Service has developed a system of communications covering Tasmania with links to the mainland. The

<sup>(</sup>b) At 31 December 1983.

communications system provides great flexibility and reliability, and is available for use by all emergency services.

In time of enemy action or hostilities against the State, the State Emergency Service is the co-ordinating authority of all civil defence measures as defined by the Commonwealth and State Governments.

#### Administrative Structure

State Emergency Service administration in Tasmania is organised on a three-level basis; municipal, regional and State. The State is divided into three regions, centred on Hobart, Launceston and Burnie. Each region is administered by a full-time regional officer assisted by a staff officer, and operations within regions are co-ordinated from regional emergency operations centres. State headquarters (Hobart) is also responsible for maintaining and operating the State Emergency Operations Centre.

#### Training

Training is undertaken at State and regional headquarters and at municipal level. The State Emergency Service is responsible for the nomination of Tasmanian representatives attending courses and seminars at the Australian Counter Disaster College, Mount Macedon, Victoria. The Service also conducts a variety of counter disaster skills and procedure courses for other Tasmanian emergency services and for involved members of the public, private enterprise and various government departments.

#### Equipment and Finance

Certain items of protective clothing, operational and training equipment for use by the Service are provided annually by the Commonwealth Government through the Natural Disasters Organisation. Certain regional staff salaries are funded by the Commonwealth. All other funding is by the State Government.

#### Fire Prevention and Fire Fighting

#### State Fire Commission

Under the provisions of the *Fire Service Act* 1979, which was proclaimed on 1 November 1979, a new single Tasmania Fire Service was created. The State Fire Authority, the Rural Fires Board, and all Urban Fire Brigade Boards which had previously administered the several fire services, were abolished and their functions were assumed by a new State Fire Commission.

The Commission consists of the Commissioner, the Director of Urban Brigades, the Director of Country Brigades, two representatives of local government and a representative of the Treasurer.

The State is divided into three regions (Southern, Northern, and North-Western) each under the control of Regional Chief Officers who *inter alia* are responsible for the development of programs of hazard reduction in urban and country areas and protection of life and property; each having regional administrative support. The operational branches of the Service comprise 39 urban brigades and some 367 country fire brigades. Hobart and Launceston brigades are almost totally manned by permanent officers and firefighters while the brigades at Burnie and Devonport are manned by a combination of permanent officers and firefighters, and partly-paid volunteers. All other urban fire brigades are manned by partly paid volunteers; all country fire brigades are manned by unpaid volunteers.

A central Training Division is responsible for the development of training programs and the training of permanent staff and volunteers of both urban and country brigades. An Operations Division is responsible for the development of effective communications, operational systems, facilities and procedures. The Fire Prevention Division is responsible for inspection of premises, ensuring that general fire regulations are adhered to, and public education on fire prevention and protection matters.

A central Administration Division of the Fire Service has been developed by the

amalgamation of the administrative sections of all previous branches and is responsible, through the Commissioner, to the State Fire Commission.

A Fire Service Advisory Council has been established under the Fire Service Act 1979 to: advise the Minister for Police and Emergency Services on any matters affecting the administration of the Act referred to it by him; advise the Commission on any matters relating to preventing and extinguishing fires referred to it by the Commission; and advise the Commission on any matter that should, in the opinion of the Council, be brought to the attention of the Commission. The Council, under a Chairman appointed by the Governor, consists of 17 members representing Tasmania Police, Forestry Commission, Municipal Association of Tasmania, Tasmanian Farmers and Graziers Association, State Fire Commission Officers' Association, Royal Australian Institute of Architects, Forest Industries Association, pulp and paper manufacturers and woodchip exporters, United Firefighters' Union, Urban Volunteer Firefighters Association, Country Fire Brigades Association, Commissioner of the State Fire Commission, Director of Urban Brigades and Director of Country Brigades.

The funding provisions of the Fire Service Act 1979, provide for the ratepayers' contribution to the Fire Service to be related to the cost of operating that category of fire brigade which services the ratepayers' property. The State Government is required to meet the full amount of the costs of those components of the Fire Service which do not have a direct relationship to actual brigade operating costs. In addition, contributions are raised by way of an impost on the insurance industry and by the introduction of a levy on motor vehicle registration, the total of which is used to offset the cost of operating fire brigades.

#### **Further References**

ABS Publications Produced by the Tasmanian office:

Court Statistics, Tasmania (4502.6), annual. Prison Statistics, Tasmania (4503.6), annual. Police Statistics, Tasmania (4504.6), annual.

ABS Publications Produced by the Canberra office: Year Book Australia (1301.0), annual.

Other Publications

COMMISSIONER OF POLICE, Annual Report. (Government Printer, Hobart.)
LICENSING BOARD OF TASMANIA. Annual Report. (Government Printer, Hobart.)
PAROLE BOARD. Annual Report. (Government Printer, Hobart.)
STATE EMERGENCY SERVICE. Annual Report. (Government Printer, Hobart.)
STATE FIRE COMMISSION. Annual Report. (Government Printer, Hobart.)

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## Chapter 9

## LABOUR AND WAGES

#### **EMPLOYMENT**

#### Labour Force and Employment

It is essential to distinguish between 'labour force' and 'employees' since *employment* statistics in this chapter relate mainly to wage and salary earners. These are, however, only one component of the labour force which also comprises employers, self-employed persons, unpaid helpers and unemployed persons.

#### Labour Force

Since the 1966 Census, a set of questions, based on activity in the week before the Census, has been asked to establish who should be included in the labour force. Briefly, the questions ask whether the person: (i) had a job or business of any kind last week (even if temporarily absent from it); (ii) did any work at all last week for payment or profit (unpaid helpers who worked were to answer yes); (iii) was temporarily laid off by his employer without pay for the whole of last week; and (iv) looked for work last week (ways of 'looking for work' were specified on the Census form).

The 1966, 1971, 1976 and 1981 labour force included all persons answering yes to any one of these four questions. The effect of the new definition was to include additional persons in the labour force. This applied particularly to those working part-time (sometimes for only a few hours a week), some of whom in earlier censuses may not have considered themselves as '... engaged in an industry, business, profession, trade or service'.

The total of persons recorded as unemployed in 1976 and 1981 was compiled from persons answering no to questions (i), (ii) and (iii) and ves to question (iv).

The following table shows that over the five years 1976 to 1981, male employment showed little movement; there was some growth in female employment; the number of unemployed people, male and female, doubled; the male labour force participation rate decreased; and the female labour force participation rate increased.

# Labour Force Status of Population Aged 15 Years and Over, Tasmania ('000)

Labour force status	30 J	30 June 1976 (a)			30 June 1981		
	Males	Females	Persons	Males	Females	Persons	
Employed	108.3 4.0	55.7 2.7	163.9 6.7	109.3 8.5	61.1 5.6	170.4 14.1	
Labour force	112.3 30.2	58.3 86.4	170.6 116.6	117.9 34.8	66.7 90.1	184.5 124.8	
Total population aged 15 years and over.	142.5	144.7	287.2	152.6	156.7	309.4	

<sup>(</sup>a) The 1976 census figures are based on a sample of approximately 50 per cent of census schedules which were processed.

#### Labour Force Estimates (Intercensal)

## The Population Survey

Population censuses tend to be expensive undertakings and are therefore held only at five-yearly intervals. However the demand for regular census-type information exists right through the intercensal periods; the most sought data are those describing the labour force. To meet this demand, the Bureau designed in 1960 a special sample of private households and non-private dwellings under the title 'population survey' and it trained teams of interviewers to contact the selected sample units by personal visit with the aim of filling in questionnaires on the spot.

The population survey can be used to collect an extremely wide range of data but the main routine application has been the labour force inquiry, conducted in February, May, August and November of each year up to February 1978 and monthly, thereafter. The questionnaire is filled in for persons 15 years and over within each sampled unit and the definitions of employment, unemployment, etc., are basically the same in concept as those used in population censuses. Naturally the estimates are subject to sampling error. The reliability of estimates based on sample surveys are measured by the 'standard error'. The specialist reader is referred to the Bureau's Canberra Office publication *The Labour Force* (Cat. No. 6203.0), where tables appear stating the standard errors associated with the estimates. The following table gives details of elements of the civilian labour force based on estimates derived from recent population surveys:

Civilian Population 15 Years of Age and Over, by Labour Force Status, Tasmania (a) r

Month	Employed (b)			Unemployed (c)		Total labour force (d)			Civilian
	Agri- culture ('000)	Other indus- tries ('000)	Total ('000)	Number ('000)	Per cent of labour force	Number ('000)	Per cent of popula- tion	Not in labour force ('000)	popula- tion aged 15 and over ('000)
				Male	es				
1981—									
November	9.3	102.8	112.1	6.5	5.5	118.6	76.0	37.5	156.1
February	9.5	103.1	112.6	10.4	8.4	123.0	78.5	33.6	156.6
May	8.8	101.0	109.8	10.7	8.9	120.5	76.7	36.5	157.0
August	7.6	101.2	108.9	10.4	8.9	119.3	75.8	38.0	157.3
November		97.6	105.7	11.9	10.1	117.6	74.7	39.9	157.6
1983—	***	,,,,	100.7	,	10.1	117.00	,	57.7	15710
February	10.1	95.5	105.6	14.6	12.1	120.2	76.1	37.8	158.1
May		97.0	106.0	13.3	11.1	119.3	75.2	38.3	158.6
August	9.0	98.3	107.3	12.1	10.1	119.4	75.0	39.8	159.2
November		98.6	107.2	11.8	9.9	119.0	74.4	40.8	159.8
1984		7070	10112		,,,	117.0	,	70.0	10,10
February	8.3	101.4	109.7	13.1	10.7	122.8	76.5	37.6	160.4
May		101.1	108.6	11.6	9.7	120.2	74.6	40.9	161.0
August		100.3	107.1	13.8	11.4	120.9	74.8	40.7	161.6
November		102.9	110.2	11.6	9.5	121.8	75.0	40.5	162.3
				Fema	les				
1981—									
November	2.9	58.1	60.0	5.6	8.6	65.6	40.7	95.7	161.3
1982—		50.1	00.0	5.0	0.0	05.0	, , , ,	,,,,	101.5
February	2.3	53.7	56.0	7.4	11.7	63.4	39.2	98.4	161.8
May	2.4	55.5	57.9	6.4	10.0	64.3	39.6	97.9	162.2
August		56.5	58.2	6.8	10.5	65.0	40.0	97.6	162.6
November		58.0	60.3	6.2	9.4	66.6	40.8	96.5	163.0

continued next page

Civilian Population 15 Years of Age and Over, by Labour Force Status, Tasmania (a) r-continued

	Employed (b)		Unemployed (c)		Total labour force (d)			Civilian	
Month	Agri- culture ('000)	Other indus- tries ('000)	Total ('000)	Number ('000)	Per cent of labour force	Number ('000)	Per cent of popula- tion	Not in labour force ('000)	popula- tion aged 15 and over ('000)
				Fema	les				
1983—	• •	56.0	50 O		10.4	(5.7	40.1	07.0	163.5
February	2.8	56.0	58.8	6.8	10.4	65.7	40.1	97.9 97.3	164.1
May		56.6	59.5	7.3	10.9	66.7	40.7	100.1	164.1
August		55.3	57.6	6.8	10.6	64.4	39.1		
November	2.9	56.3	59.2	6.8	10.2	66.0	40.0	96.8	165.1
1984—	2.2	540	56.5	0.1	12.6	647	39.1	100.9	165.6
February		54.2	56.5	8.1	12.6	64.7		97.3	166.2
May		58.8	61.1	7.9	11.4	68.9	41.5	100.2	166.9
August		57.7	59.4	7.3	10.9	66.7	40.0	98.5	167.5
November	2.3	60.8	63.1	6.0	8.6	69.0	41.2	90.3	107.3
				Perso	ons				
1981—									
November	12.3	159.8	172.1	12.1	6.6	184.2	58.0	133.2	317.4
1982—									
February	11.7	156.9	168.6	17.8	9.5	186.4	58.5	132.0	318.4
May	11.2	156.5	167.7	17.1	9.3	184.8	57.9	134.4	319.3
August		157.8	167.0	17.3	9.4	184.3	57.6	135.6	319.9
November	10.3	155.8	166.1	18.2	9.9	184.2	57.5	136.4	320.6
1983—									
February		151.6	164.5	21.4	11.5	185.9	57.8	135.7	321.6
May		153.5	165.4	20.6	11.1	186.0	57.6	136.7	322.7
August		153.5	164.9	18.9	10.3	183.8	57.1	140.0	323.8
November	11.4	154.9	166.3	18.6	10.0	184.9	56.9	140.0	324.9
1984—								400 -	
February		155.7	166.3	21.2	11.3	187.5	57.5	138.6	326.0
May		159.9	169.6	19.5	10.3	189.1	57.8	138.1	327.2
August		157.9	166.5	21.1	11.2	187.6	57.1	140.9	328.5
November	9.6	163.7	173.3	17.5	9.2	190.9	57.9	139.0	329.9

- (a) This series is based on a regular survey of a sample of the population. The estimates relate to all persons aged 15 years and over with the exception of members of the permanent armed forces and certain diplomatic staff.
- (b) Includes all those who, during the survey week: (i) worked for one hour or more for pay or profit; or (ii) worked 15 hours or more without pay in a family business (or farm); or (iii) were employees who had a job but were not at work and were on paid leave, leave without pay for less than four weeks up to the end of the survey week, stood down, on strike or locked out, on workers' compensation and expected to return to their jobs or receiving wages and salaries while undertaking full-time study; or (iv) were employers or self-employed persons who had a job, business or farm but were not at work.
- (c) Includes all those who, during the survey week, were not employed and who: (i) did not have a job and were actively seeking full-time or part-time work, or (ii) who were laid off without pay for the whole week.
- (d) Includes all those classified as employed or unemployed during the survey week.

# Employment by Industry, Tasmania (a) r ('000)

					Industry				
Month	Agricul- ture and services to agricul- ture	Manu- factur- ing	Con- struc- tion	Whole- sale and retail trade	Finance, property, business services	Commun- ity services	Recrea- tion, etc.	Other industries (b)	Total
				М	ales	•	<del></del>		
August—									
1979	9.0	22.4	13.6	20.5	4.9	10.6	4.6	26.2	111.9
1980		23.2	13.7	19.6	7.1	10.9	4.0	26.3	112.6
1981		22.1	13.0	19.5	6.3	12.6	4.4	25.3	111.7
1982		20.8	12.3	17.8	5.4	13.6	4.6	26.7	108.9
1983		20.1	9.4	17.4	6.5	11.3	4.7	28.7	107.3
1984	6.8	21.3	9.3	17.1	6.6	12.1	5.2	28.8	107.1
				Fen	nales				
August-									
1979	2.3	5.2	1.6	15.3	5.2	17.9	8.0	5.4	61.0
1980		4.1	1.4	12.9	6.9	18.9	7.2	6.0	59.9
1981		5.5	1.1	12.3	4.3	21.3	6.9	6.5	65.8
1982		3.5	1.2	11.8	4.3	21.6	7.0	5.7	58.2
1983		5.0	(c)	11.7	5.2	20.1	7.3	5.4	57.6
1984	1.7	4.8	(c)	12.0	4.4	21.5	7.9	6.1	59.4
				Per	sons				
August—									
1979	11.3	27.7	15.2	35.8	10.2	28.5	12.7	31.6	172.9
1980	10.0	27.3	15.1	32.5	14.0	29.8	11.3	32.3	172.5
1981	11.3	27.6	14.1	31.8	10.4	33.4	11.2	31.7	171.6
1982	10.6	24.3	13.5	29.5	9.8	35.2	11.6	32.4	167.0
1983	11.4	25.0	10.4	29.1	11.7	31.4	12.0	34.1	164.9
1984	8.6	26.1	10.2	29.1	11.0	33.6	13.1	34.9	166.5

<sup>(</sup>a) These figures are derived from the Labour Force Survey, and should only be used as an indication of longer term trends in employment by industry. The ABS has implemented, from June quarter 1983, an extended survey of private employers each quarter to provide a new series of employment estimates. Further details may be found in the Information Paper (Cat. No. 6239.0) issued on 8 July 1981. Survey details are available in the publication Employed Wage and Salary Earners, Australia (Cat. No. 6248.0).

#### Civilian Employees of Government Bodies

In Tasmania, as in other Australian States, a relatively high proportion of wage and salary earners is employed by government bodies operating at four levels; Commonwealth, State, local and semi-government (with the complication that semi-government authorities may have been created by either Commonwealth or State legislation). For the purpose of these statistics, government employees include persons working on government services such as railways, bus services, banks, post offices, power and light, air transport, education (including universities), radio, television, police, public works, government factories, departmental hospitals and institutions, etc., as well as those engaged in administrative services.

Estimates of private and government employment are on a revised basis which has been designed to achieve uniformity of classification with other statistical collections. The

<sup>(</sup>b) Includes the following industries: Forestry, fishing and hunting; Mining; Electricity, gas and water; Transport and storage; Communications; Public administration and defence.

<sup>(</sup>c) Subject to sampling variability too high for most practical uses.

principal changes affecting the private/government dissection of employment estimates are as follows:

- Hospitals: Non-departmental 'public' hospitals (other than those run by religious or charitable organisations) are now classified to State Government.
- Marketing Authorities: All marketing authorities or boards (other than those
  which are purely growers' or producers' co-operatives) are now included
  in the government sector as they exercise functions which are fundamentally those of government.

The following table shows the number of government employees in Tasmania according to the level of government:

	('00	(0)		
Year and sex	Le	Total		
rear and sex	Commonwealth (a)	State (a)	Local	Total
August 1982— Males Males Females		20.2 16.5	2.5 0.5	29.8 19.5
Persons	9.5	36.7	3.1	49.3
August 1983— Malesnew series (a) Females		22.0 17.5	2.7 0.5	31.8 20.4
Persons	9.6	39.5	3.2	52.2
August 1984— MalesFemales		21.9 17.6	2.9 0.6	32.2 21.0
Persons	10.0	39.6	3.6	53.2

Civilian Employees of Government Bodies, Tasmania, at 30 June ('000)

## Department of Employment and Industrial Relations

The Department of Labour and National Service was established in 1940 to bring together employment and industrial functions which were then being undertaken by various other departments. It became the Department of Labour in 1972 but was reconstituted as the Department of Labour and Immigration in 1974 to incorporate the immigration function. The Department was renamed Employment and Industrial Relations in 1975 when the responsibility for immigration was transferred to the new Department of Immigration and Ethnic Affairs.

The Department was divided in 1978 into a Department of Industrial Relations and a Department of Employment and Youth Affairs; the Office of Youth Affairs was, at that time, transferred to Employment and Youth Affairs from the former Department of Environment, Housing and Community Development. In 1982 the two departments were reunited to form the Department of Employment and Industrial Relations.

#### Industrial Relations

The Industrial Relations Division of the Department is responsible for the continuous review and evaluation of the social and economic effects and implications of industrial relations developments in Australia and overseas, for formulation of policy advice to Government on effective industrial relations, and the co-ordination and implementation of Government industrial relations policy.

<sup>(</sup>a) From the June quarter 1983, payroll data were collected from all government departments and authorities on a quarterly basis to correspond with the private sector quarterly sample survey of employment and earnings. Because of the changes to collection arrangements, reference period, the treatment of part-time employees and inclusion of government employees in forestry and services to agriculture, differences occur between the new and the old government series. Excludes defence forces.

Through its Working Environment Branch the Division also seeks to encourage and help organisations to:

• Develop and implement policies on working environment issues, including employee participation:

• Facilitate the development of a tripartite view of employee participation and programs for its application;

 Undertake and stimulate, research and develop, promote and co-ordinate training in advanced personnel practices and participative practices;

• Develop and maintain information systems on working environment issues.

Local Trades Committee: For persons who have not completed an Australian apprenticeship, national recognition as a tradesman in the metal, electrical and footwear trades may be obtained by way of a Tradesmen's Certificate issued under the Tradesmen's Rights Regulations Act 1946.

In brief, the Tradesmen's Certificate may be issued by the Local Trades Committee to:

 settlers from overseas suitably qualified by specific overseas trade training and/or employment experience;

 suitably experienced people who have learned the skills of the trade informally on the job;

• ex-servicemen who have completed specific trade training other than apprenticeship while serving in the Australian defence forces.

## Arbitration Inspectorate

The Arbitration Inspectorate is responsible for securing the observance of the Conciliation and Arbitration Act and Regulations and of Federal awards and agreements.

The Arbitration Inspectorate conducts inspections at employers' workplaces where those employers are bound to Federal awards and agreements to ensure compliance with those awards and agreements. It also has a responsibility to advise employers and employees of their rights and obligations under the *Conciliation and Arbitration Act*, Regulations, Federal awards and agreements.

### **Employment**

The Employment Division of the Department is responsible for the formulation of national labour force policies, including responsibility for the operation of the Commonwealth Employment Services (CES) under the Commonwealth Employment Services Act 1978.

# The Commonwealth Employment Service

The Commonwealth Employment Service (CES) was originally established by Commonwealth legislation under Section 47 of the Re-Establishment and Employment Act 1945 and under the Social Services Legislation Declaratory Act 1947. In August 1978 a new Commonwealth Employment Service Act was passed providing for a National Director and State Directors of the CES and national, State and local committees, with an advisory role comprising a range of representatives from the community.

## The functions of the CES are:

• To assist persons seeking employment or a change in employment to obtain suitable positions having regard to their experience, training or qualifications, and to the economic and other needs of the Australian community. In particular to: provide persons with information relating to employment, such as advice about qualifications for occupations and vocational guidance; and make special arrangements and facilities to assist immigrants, Aboriginals, the young, the handicapped, school leavers and those with professional or technical qualifications or those who have special requirements or disadvantages in relation to employment.

- To assist employers to fill vacant positions with available persons who are suitable for the performance of the duties and who meet employers' requirements for the positions.
- To promote and implement manpower programs and other measures designed to ensure a high level of employment.
- To register persons who are unemployed and who wish to claim unemployment benefits under the Social Services Act 1947 and provide help in seeking employment for persons claiming or receiving such benefits. It is possible for a person to register as unemployed but make no claim for unemployment benefit.

The next table gives details of persons receiving unemployment benefit each month for recent years:

Number of Po	ersons Re	ceiving One	empioymen	t Benent,	i asmania (	<i>a)</i>	
Month	1978	1979	1980	1981	1982	1983	1984
January	9 244	11 244	11 621	12 310	15 505	20 385	22 081
February	9 577	11 876	11 849	12 910	16 127	21 770	21 410
March	8 785	11 028	11 143	12 169	15 202	20 594	20 200
April	9 119	9 9 7 5	10 421	12 112	15 196	19 904	19 639
May	9 383	10 104	10 651	12 414	15 643	20 040	19 179
June	9 757	10 420	11 121	12 929	16 263	20 355	19 150
July	9 770	9 922	10 902	13 175	16 977	20 478	19 249
August	9 935	10 257	10 750	13 893	17 714	20 240	19 627
September	10 206	10 503	10 770	15 137	18 781	20 207	19 643
October	9 812	10 203	10 921	13 663	18 950	19 600	19 225
November	9 639	9 882	10 722	13 238	18 570	19 507	19 093
December	0.508	10 180	10 753	13 306	10.803	20.063	10 835

Number of Persons Receiving Unemployment Benefit, Tasmania (a)

## **Labour Force Programs**

The Department is charged with the role of developing and administering employment and training schemes to give people the skills and experience they need to obtain and keep employment. These programs have the joint functions of helping to overcome identified shortages of skills in the labour market and assisting in the long term restructuring of the work force. Programs include:

#### Youth Employment and Training Programs

Participation and Equity Program (PEP): The Department is closely involved with the State and Commonwealth Education Departments in the administration of this scheme which provides courses at Technical and Further Education (TAFE) Colleges for unemployed people aged 15 to 24 years who need further education or skill training before they can obtain employment. The courses are vocationally oriented and range from pre-apprenticeship courses to basic literacy, numeracy and life skills training. Eligible trainees attending these courses are paid special allowances.

Community Youth Special Projects (CYSP): CYSP provides assistance to community organisations which develop full-time structured employment-related training opportunities, combining vocational courses, life skills, personal development, remedial education and work experience for unemployed young people most disadvantaged in the labour market.

Financial assistance is available to community organisations to meet establishment and operational costs of individual projects. Eligible participants may receive an allowance equivalent to their unemployment benefit entitlement plus \$6 per week.

Experimental Training Projects: Innovative short-term, small-scale or specialised post-school training arrangements may be funded as experimental training projects to meet identified training and employment-related needs of unemployed young people.

<sup>(</sup>a) Compiled from information furnished by the Department of Social Security. Monthly figures may not be directly comparable in all cases because of changes in the definition of unemployment and of variations in compilation procedures.

Financial assistance is available to appropriate training institutions, employer and industry associations and established community groups to develop and conduct experimental activities which meet local labour market needs.

Projects aim to benefit 15 to 24 year olds who have been unemployed and away from full-time education for at least four of the last 12 months. Preference is given to providing assistance to those who are most disadvantaged such as young women, migrants, the long-term unemployed and young people from rural/isolated areas.

Trainees are eligible for an allowance and related benefits.

## Assistance for Work Experience

The Special Youth Employment Training Program (SYETP): The CES pays employers a subsidy to employ and train young people aged 15 to 24 who have been unemployed for at least four months. Higher subsidies are paid for young people aged 18 to 24 who have been unemployed for eight months or more.

Adult Wage Subsidy Scheme was introduced in March 1983 with the objective of providing a period of stable employment for unemployed adults. Employers are paid a wage subsidy to provide 34 weeks continuous employment to persons over 25 years who have been unemployed for at least eight of the previous 12 months. Higher subsidies are paid for a 12 month period to employers who employ adults over 45 years who have been unemployed for at least 12 months.

## Special Training

Disabled Persons: Under these programs disabled people may receive allowances to attend formal courses. Employers may receive subsidies for offering disabled persons on-the-job training. The subsidies are higher than those available to other groups because of the particular difficulties faced by disabled persons.

Aboriginals: A national employment strategy has been developed to provide training and employment for Aboriginals. As well as training in the public sector, private employers are paid subsidies to employ Aboriginals who receive on-the-job training.

Special Needs Job Seekers: Persons assessed as having difficulty in finding or keeping employment because of social, cultural or other personal factors may receive assistance in the form of subsidised on-the-job training for a period twice that normally provided for a given occupation.

#### Skills Training

General Training Assistance: Assistance for individuals is provided by way of training allowances while undertaking formal courses and subsidies to employers to provide on-the-job training.

Skills in demand: Assistance is available under this program:

- to provide assistance to industry to establish new or improved training arrangements, particularly those of a nationally consistent nature;
- to provide assistance to industry to overcome skill shortages; and
- to assist unemployed persons with training to enable them to obtain stable employment.

Funding is provided where there is a current or anticipated industry shortage in a particular locality and/or the need established for a new training arrangement where none previously existed.

In the selection of trainees:

- there should be joint industry/Government development of selection criteria;
- the Commonwealth Employment Service (CES) will ascertain whether there are unemployed people who meet the selection criteria;
- the selection panel for trainees will comprise industry representatives and Department of Employment and Industrial Relations.

Industry Training Services: This program is designed to aid and stimulate the systematic training programs through all sectors of industry and commerce. The program funds the operation of the National Training Council and the Industry Training Committees. The aim is to use training to promote efficiency, productivity and safety as well as industry's capacity to cope with new equipment, new techniques and changes in processing and market requirements.

Industry Training Committees are established in Tasmania in the following industries: building and construction, dairy, fishing, local government, printing, retail food, motor, timber, tourism, rural and textile, clothing and footwear.

### Trade Training

The Commonwealth encourages employers to indenture and train apprentices. The Commonwealth Rebate for Apprentice Full-Time Training (CRAFT) provides employers with an incentive to increase the number of apprentices they employ and to improve the quality of training. Under the CRAFT scheme tax exempt rebates are paid to employers for each day an apprentice is released from work to undertake formal training. An allowance is payable to some apprentices who have to live away from home during their apprenticeship.

Special Apprentice Training Schemes: In addition to CRAFT, special arrangements under a variety of schemes can be made to encourage improvement in the quantity and quality of apprentice training.

## **Community Youth Support Scheme**

The Community Youth Support Scheme (CYSS) is a Commonwealth Government scheme which was introduced in October 1976 as a means of encouraging local community groups to become involved in assisting unemployed young people. The scheme, which is the first of its kind, recognises that young people experiencing periods of unemployment at a time when there is a shortage of jobs may need support or assistance.

The form in which this support may be offered varies according to the particular needs of the young people concerned. Organisations and groups within the community are encouraged to seek funding to run programs and services for young unemployed people. The scheme is designed to complement other Government initiatives previously introduced to increase employment and training opportunities for young people. Accordingly, CYSS programs must contain some orientation towards employment. This need only be in fairly general terms. It is not intended that CYSS should provide formal skills training as this may be dealt with under labour force programs.

CYSS is not a job creation program, nor is it a means of getting jobs done for organisations which need free labour. CYSS may help young people in several ways:

by better equipping them to get a job. Sessions on how to handle job interviews, how to go about applying for a job and even where to look for jobs will give a young person confidence and a better chance of finding employment;

by giving assistance with social, financial, educational, health and general welfare problems that could be making it more difficult for them to find

employment; and

by providing a wide range of activities to make the period of unemployment
more interesting and more creative. Because of the shortage of job
vacancies some young people may face long periods of unemployment.
They may become bored, frustrated and disillusioned. CYSS funds may
be used to provide outdoor activity, art and craft workshops, sessions
on basic car maintenance, cookery, etc.

Any young unemployed person under 25 years of age, over the legal school leaving age (or with special exemption) and not in full-time education, is eligible to participate in CYSS projects. This includes people receiving a pension or benefit who will eventually be capable of work. There are 22 CYSS groups throughout the State.

## **Community Employment Program**

The Community Employment Program (CEP) is a major initiative of the Commonwealth Government to create employment opportunities.

The Program operates under the Community Employment Act of 1983 and involves the Commonwealth and State Governments in a constructive partnership with local government authorities and community organisations.

The program commenced on 1 August 1983 and is to be funded for a period of three years. Approximately 65 000 unemployed will be assisted by the program in 1984-85.

A total of \$300 million for 1983-84 was made available for CEP, of which \$250 million was distributed to the States and territories principally on a population basis. From the \$250 million, special allocations were made in 1983-84 for local roads and country water resources projects.

\$50 million of the \$300 million for the program was provided for job creation projects managed by Commonwealth departments and authorities. This Commonwealth component of CEP will be subject to separate administrative arrangements. \$410 million has been appropriated for the program during 1984-85, of which \$50 million has again been provided for projects managed by Commonwealth departments and authorities.

## Objective

The objective of CEP is to create additional employment opportunities for unemployed persons through the funding of labour intensive projects of social and economic benefit to the community.

#### **Features**

CEP is to be directed at those unemployed persons who are particularly disadvantaged in the labour market and who are consequently least likely to benefit from improved economic activity; particularly the longer term unemployed and those suffering from social and other disadvantages.

Equal access is to be provided for men and women to employment opportunities. In some instances, this may necessitate special measures to ensure that women receive an equal share of the jobs created (funds earmarked for roads expenditure would be excluded).

Positions under CEP should provide persons with work experience and/or training which will assist participants in gaining on-going employment.

Projects should lead to the provision of facilities and services of public and community benefit.

Priority consideration will be given to projects in areas of high unemployment.

#### The Consultative Committee

All applications for CEP grants are considered on their merits by a Consultative Committee in the State. The Committees comprise Commonwealth and State Government officials and representative(s) of local government, non-government organisations and interest groups. The Committees have the functions of encouraging and facilitating the development of worthwhile projects in the State and ensuring that the targets and objectives of the Program are met.

#### The Secretariat

Each Consultative Committee is serviced by a joint Commonwealth and State Secretariat. The Secretariat is responsible for receiving applications for CEP grants and ensuring that each application meets the guidelines and has provided sufficient information for consideration by the Consultative Committee. It also assists the Committee in its developmental role by co-ordinating the provision of relevant information on individual projects and characteristics of the labour market in their respective States.

# Tasmanian Committee on Discrimination in Employment

On 15 June 1973, the Australian Government ratified Convention No 111 of the International Labour Organisation—Discrimination (Employment and Occupation) 1958. Over 80 countries throughout the world have now ratified this important human rights convention.

For the purposes of the Convention the term 'discrimination' includes "... any distinction, exclusion or preference made on the basis of race, colour, sex, religion, political opinion, national extraction or social origin, which has the effect of nullifying or impairing equality of opportunity or treatment in employment or occupation".

In a move unique among the signatory countries to the Convention, Australia established Committees on Discrimination in Employment and Occupation to act as operational bodies in promoting the ideal of equal opportunity in the work force. The Committee has a tripartite structure, with representatives of both Australian and State Governments, of employers and employees. They are presided over by an independent chairman. The Tasmanian Committee is part of the Australia-wide machinery.

The Committee's chief aim is to enlist community support, through a nation-wide education and publicity campaign, in the promotion and acceptance of a policy of non-discrimination. Discrimination in employment is an anti-social activity which militates against the basic principles of human rights.

The Tasmanian Committee investigates complaints of discrimination from members of the public. Most of the cases dealt with so far have been complaints on sex grounds and on the basis of race or nationality. Complaints are followed up with the employer concerned, and a feature of the Committee's work has been the co-operation and support it has received from most employers.

The Committee also deals with complaints of sexual harassment in employment, and discrimination on the grounds of age, marital status, criminal record, disability, sexual preference, nationality and other grounds.

The Tasmanian Committee has been heartened by the progress which has been made in efforts to eliminate discrimination in the work force. Since it began operating in July 1973 it has seen increasing awareness by employers, employees and members of the public, of the problems of discrimination and, more importantly, of positive measures which can be taken to overcome those problems.

The Committee's role is primarily educative and conciliatory. It has no statutory powers and should not in any way be regarded as a punitive body.

The Attorney-General's Department took over responsibility for the Committees in January 1984 from Employment and Industrial Relations. This was to reduce duplication between Departments and simplify complaint handling as the Commonwealth Government introduces and amends human rights legislation.

#### INDUSTRIAL LEGISLATION AND CONDITIONS

## Apprenticeship

Apprenticeship Commission

The Apprenticeship Commission was set up under the Apprentices Act 1942 to: encourage, regulate and control training in proclaimed trades; assist youths towards successful trade courses; and provide properly trained craftsmen for industry. The Commission, which meets each month, consists of three representatives of trade unions, three of employers' organisations, a nominee of the Minister for Education and the President, all members being appointed for a three-year term. To keep the Commission up-to-date with the latest developments, Trade Committees have been formed for particular industries, with both employers and employees represented.

Apprentices are trained at work and at technical classes, and supervisors report on the effectiveness of the training; supervisors also give on-the-spot advice to employers and apprentices where their mutual obligations are concerned and refer matters that cannot be settled in this way to the Commission for decision.

## Apprenticeships

An apprenticeship may not be commenced without prior application to the Commission which determines the suitability of employers for training apprentices and the educational qualifications required for entry to a particular trade.

The apprentice serves a three month probationary period before a contract (indenture) is made and formally signed by the employer, parent/guardian, and apprentice, prior to being registered with the Commisson. The Commission determines disputes arising between the indentured parties' rights and duties; no apprenticeship may be terminated, suspended or assigned other than by its authority. When an apprenticeship has been completed, the employer and the Commisson certify the original indenture to this effect. Where apprentices are required to undertake technical training, such instruction is mandatory. Apprentices who attend technical classes during working hours do so without loss of pay. (Country apprentices in remote areas attend Block Release Training, usually three fortnightly training periods each year.) The progress of apprentices at technical colleges is reported to the employer, parent/guardian, and the Commission where unsatisfactory reports are investigated. An annual training progress and attendance report is also required to be submitted to the Commission by the employer.

Apprentices are encouraged in the following ways: by payment of proficiency allowances for annual examinations passed successfully in the allotted time; by certificates of proficiency for apprentices successfully completing the mandatory trade course of technical instruction; by reducing the apprenticeship term by one year in some cases, where the qualifying trade course is completed in the allotted time; and by the award of bursaries.

The Commission offers an award of \$250 and a Bronze Medallion to the outstanding apprentice in each of eleven trade groups. The 'Apprentice of the Year' who qualifies for an award of \$600 is selected from the winners. Should there not be an outstanding apprentice in any particular trade group, the prize money allotted for that trade group may be awarded to those apprentices who receive Commendations.

## Number of Apprentices

The following table shows the number of apprentices in Tasmania and also details of apprenticeships registered and completed:

Number	of	Apprentices,	Apprenticeships	Registered a	and	Completed,	Tasmania

Particulars	1978-79	1979-80	1980-81	1981-82	1982-83	1983-84
Number at 30 June (a)— Indentured apprentices		4 465 296	4 466 332	4 177 203	3 647 179	3 208 273
Total	4 775	4 761	4 798	4 380	3 826	3 481
During year— New apprenticeships registered Apprenticeships completed	1 278 1 007	1 379 1 140	1 362 1 190	1 074 1 083	761 1 091	932 1 094

<sup>(</sup>a) Distributed in proclaimed trades.

## **Industrial Safety and Accident Prevention**

### General

Responsibility: The Department of Labour and Industry administers legislation relating to safety, health and welfare in work places generally (but excluding work places

subject to the *Mines Inspection Act* 1968 which prescribes safety standards for mines and mining works and is administered by the Mines Department). The Department's Technical Services Division inspectorate performs inspection and advisory functions throughout the State.

Prevention: Prevention obviously has a two-fold aspect: inspection programs aimed at pin-pointing unsafe working conditions; and education and training designed to eliminate unsafe actions.

Training: The Department endeavours to develop an attitude of 'safety consciousness' among employees and employers. This is the primary aim of general safety training. More specific training is basically aimed at educating supervisors and foremen, since an attitude of 'safety consciousness' must involve management. Formal training in industrial safety and accident prevention is available at Hobart and Launceston Technical Colleges in two year courses. Informal training is arranged by the Department of Labour and Industry, the two-day courses being based on the concept of 'training within industry'. Single sessions on industrial, farm and forest safety are also available and the Department makes arrangements to provide instructors on request.

Safety Officers: It is expected that large undertakings will have their own specialists concerned with safety matters. However, government safety officers are available to industries which may use their services for short periods. Their function is purely advisory and they assist organisations which wish to stress safety or to reduce their accident rates.

## Legislation

The Industrial Safety, Health and Welfare Act 1977 deals with physical working conditions generally and applies to all premises or places where people work (excepting mines and mining works which are subject to comparable standards imposed under the Mines Inspection Act 1968). In addition to general working standards set down in the Act and associated regulations, requirements for the use of boilers, other pressure vessels and lifting machinery are specifically prescribed. These regulations also cover work in the building and construction industry and the rural and forest industries.

#### **Industrial Accidents**

Industrial accident statistics in Tasmania are compiled from reports of workers' compensation claims submitted by insurance companies and some self-insurers. From 1977-78 the returns have been submitted by insurers to cover the number of accidents that occurred during a financial year. Previously, returns were collected for cases finalised during a financial year.

The collection is limited to those employees covered by the Tasmanian Workers' Compensation Act and therefore excludes self-employed persons, and Commonwealth Government employees. Exclusion of self-employed persons is likely to reduce coverage in industries where self-employment is prevalent (e.g. retail trade, rural industries, etc.). Because of the exclusion of Commonwealth Government employees, some industries are not covered at all, while coverage is considerably reduced in other industries (e.g. communications).

In compiling the statistics the following definitions have been adopted:

Industrial Accident: A compensatable claim under the Workers' Compensation Act 1927 that arises out of a work related event and leads to a loss of time of one day (shift) or more, permanent total incapacity or death.

Time Lost: The actual time lost from work of persons reported to be temporarily incapacitated or permanently partially-incapacitated as a result of a compensated work injury.

Cost of Claims: Includes compensation for wages lost, hospital and medical expenses and lump sum settlements of cases finalised during the year ended 30 June. Insurers are asked to estimate the cost of claims not finalised by 31 October of the following financial year.

Industry Groups: Classified in accordance with the Australian Standard Industrial Classification.

The table that follows shows the number of industrial accidents reported during 1982-83 by the extent of disability:

Industrial Accidents: Industry Group and Extent of Disability, Tasmania, 1982-83

		Ext	ent of disabi	sability		
Industry group	Temporary		Permanent total	Death	Total number of accidents	
Agriculture, forestry, fishing and hunting	565	8	1	2	576	
Mining Manufacturing—	978	7	_	_	985	
Food, beverages and tobacco	608	2 5		_	610	
Wood, wood products and furniture Non-metallic mineral products	335	5	_	1	341	
Basic metal products and fabricated		_	_		85	
metal products	835	3	_	1	839	
Transport equipment	65	3	1		69	
Miscellaneous	781	6	2 5	3	792	
Electricity, gas and water	788	1	5		794	
Construction	791	3	2		796	
Wholesale and retail trade	801	7	_	1	809	
Transport, storage and communication	422	7	2	_	431	
Finance, property and business services	86	_	1		87	
Public administration and defence		2	4		407	
Community services	1 024	5	12	3	1 044	
Recreation, personal and other services	335	3	1		339	
Total	8 900	62	31	11	9 004	

The time lost and cost of claims arising out of industrial accidents, as applicable to each industry group, is shown in the next table:

Industrial Accidents: Industry Group, Time Lost and Cost of Claims, Tasmania, 1982-83

	Time I	ost (a)	Cost of claims			
Industry group	Duration of leave (days)	Average leave (days)	Non-fatal accidents (\$)	Fatal accidents (\$)	Average per non- fatal accident (\$)	
Agriculture, forestry, fishing and hunting	14 252	25	892 680	n.p.	1 555	
Mining Manufacturing—	19 698	20	1 880 439	P	1 909	
Food, beverages and tobacco	12 782	21	751 825	_	1 233	
Wood, wood products and furniture	5 896	17	470 692	n.p.	1 384	
Non-metallic mineral products	1 515	18	123 602	_	1 454	
metal products	11 959	14	911 409	n.p.	1 088	
Transport equipment	2 906	43	256 691	_	3 720	
Miscellaneous	12 085	15	884 578	165 519	1 121	
Electricity, gas and water	11 531	15	880 408		1 109	
Construction	12 644	16	1 136 799		1 428	
Wholesale and retail trade	12 680	16	626 007	n.p.	775	
Transport, storage and communication	9 568	22	882 350	<u>.</u>	2 407	
Finance, property and business services	1 641	19	153 748		1 767	
Public administration and defence	7 038	17	760 016	_	1 867	
Community services	22 019	21	2 220 581	n.p.	2 133	
Recreation, personal and other services	7 182	21	419 983		1 239	
Total	165 396	18	13 251 808	654 340	1 474	

<sup>(</sup>a) Temporary and permanent partial disability cases only.

## Workers' Compensation

Legislation: Workers' compensation legislation in Tasmania was first introduced in 1910 but it was not until 1927 that the principle of compulsory insurance was embodied in the Workers' Compensation Act 1927.

Purpose and Limitations: The principle of the Act is provision for compensation on the death or disablement of a worker, if occasioned by personal injury arising out of and during the course of employment and while travelling in either direction between his residence and place of employment. The Act provides that this cover to and from work applies only for reasonably direct journeys, except for breaks or deviations connected with the worker's employment. Coverage is also provided for workers who are temporarily absent from work during meal breaks. Self-inflicted injuries are excluded and certain limitations are applied where serious or wilful misconduct is involved. Monetary benefits have fixed limits. All reasonable costs of medical, hospital, nursing and ambulance services and in the event of death, the reasonable costs of burial or cremation are paid. In addition, weekly payments are made during periods of incapacity and there is provision for a lump sum entitlement for specified injuries included in a schedule to the Act.

Non-contributory Basis: The Act is non-contributory, i.e. the worker does not pay into any fund for the provision of benefits. The employer is obliged to insure with an approved insurance company against the liability to compensation, except in certain cases where he is allowed to carry his own risk. In any case where an employer has no paid-up insurance policy, where the employer cannot be found or where the employer or his insurance company has become insolvent, the worker may claim against a 'nominal insurer', as if he were the employer. Amounts paid by the 'nominal insurer' are provided by all insurance companies carrying on workers' compensation business. Each company is required to contribute to these types of claims in proportion to the premium income derived from policies issued during the preceding year.

Compensation on Death: Where death results from an injury, the compensation payable to dependants wholly dependent on the worker's earnings is 284 times the current Hobart basic rate, plus seven times the current Hobart basic rate for each worker's child under sixteen years at the date of injury. Partial dependants are entitled to proportionate amounts.

Basic Rate means the minimum weekly wage payable to the lowest paid adult male employed at Hobart under the federal Metal Trades Award.

Weekly Payments During Incapacity: When the worker is totally incapacitated he is entitled to receive weekly compensation payments at whichever of the following alternatives is greater: the rate of his average weekly earnings over the period of 12 months immediately preceding the period of incapacity; or the ordinary time rate of pay for the work on which he was engaged immediately prior to the period of incapacity. When the worker is partially incapacitated the weekly payments are reduced by any amount that he is able to earn in some other suitable employment.

Maximum Limit of Weekly Payments: In cases of partial or total incapacity of any worker, the total liability of an employer in making weekly compensation payments is limited to 284 times the current Hobart basic rate.

Lump Sum Payments: In addition to weekly incapacity payments, lump sum payments are made in respect of the loss of members of the body or of bodily powers of function. In the Act, specific injuries are listed and the single amount payable is related to the current Hobart basic rate (specified as B in the following examples): loss of both feet,  $B \times 284$ ; loss of leg,  $B \times 138$ ; loss of thumb,  $B \times 51$ ; and loss of great toe,  $B \times 35$ , etc. Where more than one of these injuries are suffered in the same accident, a maximum payment equal to  $B \times 532$  may be paid.

## Long Service Leave

The Long Service Leave Act 1976 provides for the granting of 13 weeks long service leave to all employees who complete 15 years continuous service with one employer. A pro-rata entitlement applies in respect of termination of employment after less than 7 years service in certain circumstances.

Contributions to a Long Service Leave (Construction Industry) Fund, (formerly Long Service Leave (Casual Employment) Fund) are made by employers with respect to all casual employees covered by the Act. For further details, reference should be made to the 1977 or earlier editions of the *Year Book*.

#### **Trade Unions**

The following table shows details of the number of unions and the number of union members in Tasmania:

Trade Unions: Numbers and Membership, Tasmania										
Year ended 31 December	Number of separate unions	Number of members ('000)		Year ended 31 December	Number of separate unions		Annual increase in membership (percent) (a)			
1972	112	81.0	6.7	1978	123	88.9	-1.4			
1973	118	84.0	3.7	1979	121	88.2	-0.8			
1974	123	89.0	6.0	1980	122	88.4	0.2			
1975	122	86.0	-3.4	1981	123	89.8	1.6			
1976	120	85.5	-0.6	1982	124	88.1	-1.9			
1977	122	90.2	5.5	1983	123	88.6	0.6			

Trade Unions: Numbers and Membership, Tasmania

#### WAGES

## The Basic Wage

#### General

The present position is as follows: wages fixed by Tasmanian State Industrial Boards still consist of two parts, namely a basic wage and a margin: wages fixed by the Federal Conciliation and Arbitration Commission are expressed as a total wage, the basic wage concept having been abolished in federal awards in 1967. All State industrial authorities with the exception of Victoria's have retained the basic wage concept. A more detailed history of the basic wage can be found in the 1970 Year Book.

#### State Basic Wage Rates

The following table shows the awards and determination made by Tasmanian industrial authorities in recent years:

Tasmanian Basic Wage Rates

Date of operation (a)	Adult persons	Date of operation (a)	Adult persons
1977 22 August	71.30 72.40 73.50 74.50 77.50 80.00	1980 4 January	83.60 87.10 90.30 93.60 97.60 101.60

<sup>(</sup>a) Rates operative from the first pay-period commencing on or after the date shown.

<sup>(</sup>a) Over preceding year.

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## Minimum Wages

The Federal Conciliation and Arbitration Commission announced in its decision of 8 July 1966 that it intended to grant relief to low wage earners by inserting a provision prescribing a minimum wage. It ordered that the minimum male wage paid under the Metal Trades Award should be the appropriate basic wage plus \$3.75 a week (e.g. in Tasmania a basic wage of \$33.40 plus \$3.75 giving a minimum wage of \$37.15).

Tasmanian Industrial Boards introduced the concept of the minimum wage into their determinations in June 1967. Weekly minimum wage rates prescribed in Federal and State awards for recent years are shown in the following table:

Minimum Wages, Adult Males: Federal and State Awards

Date operative (a)	Federal awards	Tasmanian State Industric Boards' determinations	
27 June 1979	124.60	125.80	
4 January 1980	130.20	131.50	
14 July 1980	135.70	137.00	
9 January 1981	140.70	142.10	
7 May 1981	145.80	147.20	
1 November 1982	145.80	168.00	
6 October 1983	152.10	175.20	
6 April 1984	158.30	182.40	

<sup>(</sup>a) Rates operative from the first pay-period commencing on or after the date shown.

## **Total Wage Concept**

For a full account of events leading to the adoption of a 'total wage' concept see the 1970 Year Book. The decision abolishing the basic wage in awards of the Federal Conciliation and Arbitration Commission was handed down in June 1967 when a \$1.00 increase was awarded, to be added to the total wage. Results of recent national wage cases prior to the adoption of wage indexation principles in April 1975 follow:

- 1973 The total wage was increased by a combination of a two per cent increase plus a flat increase of \$2.50. The minimum wage was increased by \$9.00 per week.
- 1974 The Arbitration Commission again increased total award rates by a combination of a two per cent increase plus a flat rate increase of \$2.50. The minimum wage was increased by \$8.00 per week.
- 1975 Total wages were increased by 3.6 per cent in line with the movement of the Consumer Price Index during the March quarter 1975. The minimum wage was increased by \$8.00 per week, effective from 1 January 1975, and by a further \$4.00 when trial indexation was introduced.

## Total Wage Concept in Tasmania

The Federal award of June 1967 was followed by a test case argued before the Chairman of the State Industrial Boards. The employers asked for adoption of the total wage concept. The unions opposed this and argued for a \$7.30 increase in the basic wage; if a lesser amount was determined, then a minimum total wage of \$40.70 should nevertheless be fixed.

The decision in the test case (Electrical Trades) was that both male and female rates should be increased by \$1; the increase, however, should be regarded as raising the basic wage which would be retained for the present in State determinations. The State Industrial Boards have retained the basic wage and margins concepts in awards handed down following subsequent national wage case determinations of the Federal Conciliation and Arbitration Commission.

## **National Wage Case Decisions**

The Conciliation and Arbitration Commission began hearing submissions regarding wage indexation subsequent to the publication of the June quarter 1975 Consumer Price Index. Submissions were made by the Commonwealth Government, State governments, tribunals, private employers and trade unions. The Commission also sat to consider whether subsequent increases should be awarded, in line with the principles of wage indexation, following publication of the Consumer Price Index for each quarter.

On 31 July 1981 the Full Bench stated that they had abandoned the system of wage fixation based on indexation. The Full Bench stated that the viability of the system depended on the voluntary co-operation of all participants in industrial relations including those not directly represented at National Wage Hearings and concluded that events since April 1981 had shown clearly that the commitment of the participants to the system is not strong enough to sustain the requirements for its continued operation.

In September 1983 the Arbitration Commission met to consider an application by the ACTU for a 4.3 per cent increase in wages to compensate for CPI increases in the March and June quarters. The Full Bench granted the increase subject to the unions giving firm public undertakings that they will abide by the principles of wage indexation and pursue no extra claims. The decision was to be followed by non-automatic six monthly adjustments to wages for movements in the CPI during the previous two quarters and was to operate for two years.

The following table shows the increases made by the Conciliation and Arbitration Commission in National Wage Case decisions from December 1977:

General Increases in Award Total Wages: National Wage Case Decisions

Date operative (a)	Increase
977— 12 December 978— 28 February	1.5 per cent (b)
12 December	3.2 per cent
981— 9 January 7 May 983— 6 October	3.7 per cent 3.6 per cent 4.3 per cent
984— 6 April	4.1 per cent

- (a) Operative from the beginning of the first pay-period commencing on or after the date shown.
- (b) Increase of 1.5 per cent up to a maximum of \$2.60 per week.

## Award Rates of Pay Indexes

#### General

The construction of the award rates indexes is similar in general design to other indexes such as the Consumer Price Index and the Wholesale Price Indexes and is based on a representative 'basket' of occupations. The indexes of award rates depict movements. They are updated monthly on the basis of advices of award variations determined or authorised by industrial tribunals. Variations to some unregistered collective agreements are also included in the indexes; that is, those agreements made by an employer with a group of employees and which are not registered with a Federal or State industrial arbitration authority.

Based on a representative sample of award designations, the indexes are designed to measure general *trends* in award rates of pay. They do not measure relative *levels* of average award rates of pay between States and industries and exclude the effect of changes in the relative importance of industries, awards and occupations.

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## **Definitions**

Award rate of pay. The award rates used in the compilation of the indexes are those prescribed for a full week's work (excluding overtime). These rates generally consist of the base rate and any allowances or loadings that are applicable to all workers under a specific award designation. In some awards included in the indexes, regarded as paid rates awards, the award rate is set to absorb likely over-award payments.

Wage and salary earners. The coverage of the indexes is confined to full-time adult wage and salary earners whose rates of pay are normally varied in accordance with awards. For the benefit of users, separate indexes have been produced relating to wage earners only (which are broadly comparable with the scope of the old Wage Rates Index). In order to produce separate indexes for wage earners, and wage and salary earners, it was necessary to devise some arbitrary means of distinguishing between the two. For the purpose of constructing these indexes, the following definitions were adopted:

 wage earners — those engaged mainly in manual work and/or employed in blue collar occupations. Remuneration for wage earners is usually stated

in terms of a weekly wage;

• salary earners — those engaged mainly in non-manual work and/or employed in white collar occupations. Remuneration for salary earners is normally stated in terms of an annual salary.

Standard weekly hours of work relates to the number of hours per week prescribed in awards, etc. for full-time workers in particular occupations. For certain occupations (eg. teachers, university lecturers) no specific hours are prescribed. Therefore indexes of hourly award rates of pay have been compiled for wage earners only.

Award designation relates to the specific description of an occupation in an award etc. (eg. Metal machinist, Class 1).

Details for adult males and adult females covered by Federal awards etc. and for those covered by State awards may change at any time as a result of the transfer of particular awards or occupations from one jurisdiction to another.

Federal awards include awards of, or collective agreements registered with, the Australian Conciliation and Arbitration Commission, the Coal Industry Tribunal, the Flight Crew Officers Tribunal and determinations of the Australian Public Service Arbitrator; and unregistered collective agreements operative in more than one State or territory where these are significant in the particular industries to which they refer.

State awards include awards, or determinations of, or collective agreements registered with, State industrial tribunals, together with certain unregistered collective agreements where these are significant in the particular industries to which they refer and operate within one State only.

The proportions of employees covered by Federal and State awards vary considerably between States. In addition, the proportions of employees engaged in the respective industries and occupations differ from State to State. As a result, there may be differences between the series for the several States.

### Allowances and Loadings

For some award designations, general loadings of various kinds are included where these apply to all workers under particular award designations, e.g. industry allowances. Loadings payable because of length of service (e.g. service increments) have been included where appropriate. However, loadings that apply only in special circumstances (e.g. those payable because of working in wet, dirty or confined places, excess fares incurred due to location of building site, etc) are excluded. The indexes include supplementary payments specified in a number of awards such as the Metal Industry Award Part 1 and the Western Australian Metal Trades (General) Award.

Award rates of pay index numbers for adult males are not comparable with 'average weekly earnings per employed male unit' appearing in a later section of this chapter; the latter includes not only the earnings of adult wage-earners but also those of salaried

employees, junior wage-earners and part-time and casual employees; included also are over-award payments and overtime earnings. Tasmanian details by industry group are given in the next table:

Award Rates of Pay Index Numbers, Tasmania Adult Persons: Industry Groups, June 1984 (a)

Industry group	Wage earners	Wage and salary earners
Mining	177.4	177.4
Mining	201.7	201.5
rood, beverages and tobacco	192.9	192.9
Paper, paper products, printing and publishing	199.9	199.9
Metal products, machinery and equipment—	208.3	206.3
Basic metal products	199.2	199.2
Fabricated metal products, other machinery and equipment		213.3
Other (c)	207.0	207.0
Other (c)	207.2	207.2
Construction	201.6	207.2
Wholesale trade	197.6	201.4
Retail trade	197.0	196.5
Transport and storage	211.4	210.1
Communication	209.3	
Finance property and hydroge convices	209.3	208.0
Finance, property and business services	*	197.1
Public administration and defence (d)	•	196.0
Community services	203.0	199.4
Recreation, personal and other services	206.0	206.0
All industries (e)	200.7	200.1

<sup>(</sup>a) Base of each index number: weighted average minimum weekly award rate, June 1976 = 100.00. These figures are subject to revision.

## Australian Wage Index Numbers

In the next table, index numbers are shown for each Australian State:

Award Rates of Pay Indexes: Wage and Salary Earners, Australia (a) Base: Weighted Average Minimum Weekly Award Rate, June 1976 = 100

June	NSW	Vic.	Qld	WA	SA	Tas.	Australia
			Males				
1979 1980 1981 1982 1983 1984	127.8 137.4 155.9 177.2 184.0 200.1	127.8 137.6 156.0 178.7 186.6 202.8	126.9 136.4 155.4 179.6 187.8 204.2	128.2 137.9 156.1 175.7 185.0 202.0	128.6 138.5 157.6 179.9 187.0 203.9	128.3 138.4 156.8 175.0 182.7 200.1	127.7 137.4 156.0 177.9 185.5 201.8
			Females				
1979 1980 1981 1982 1983 1984	127.0 135.7 156.9 175.2 183.7 199.9	120.9 134.8 154.2 176.3 186.1 202.5	126.5 135.2 155.7 174.7 183.9 199.8	129.7 139.4 159.0 178.0 186.5 206.8	127.1 134.7 155.8 174.2 182.6 201.1	127.4 137.4 156.4 172.9 179.6 198.4	127.1 135.5 155.9 175.4 184.3 201.0

<sup>(</sup>a) For a full week's work (excluding overtime), as prescribed in awards, determinations, etc.

<sup>(</sup>b) Includes sub-divisions not shown separately or in 'other'.

<sup>(</sup>c) Includes ASIC sub-divisions 25, 28 and 34.

<sup>(</sup>d) Excludes employees in the defence forces.

<sup>(</sup>e) Excludes employees in the defence forces, agriculture, services to agriculture and employees in private households employing staff.

<sup>\*</sup> Subject to sampling variablity too high for most practical uses.

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### Average Weekly Earnings

Source of Data

The figures in the following section are derived from a quarterly Survey of Average Weekly Earnings which collects data from a sample of 3 500 private and government employers. Pay of members of the defence forces is not included.

### Definitions

Reference period refers to the last pay-period ending on or before a specified date. If the operations of the establishment(s) covered by the return were seriously curtailed by an industrial dispute, breakdown, fire, etc., during the reference period, particulars for the previous normal pay-period were obtained.

Employees comprise male and female wage and salary earners who received pay in respect of the reference period represented in the survey. Excluded are members of the Australian permanent defence forces, employees of establishments primarily engaged in agriculture, employees in private households employing staff, employees on workers' compensation, employees based outside Australia, employees paid solely from commission without a retainer, self-employed persons such as working proprietors of unincorporated businesses, subcontractors, and owner/drivers.

Full-time employees are those who work the agreed or award hours for a full-time employer in their occupation and who received pay for any part of the reference period; if agreed or award hours do not apply, employees are regarded as full-time if they ordinarily work 30 hours or more a week. Full-time employees temporarily on short-time, or who began or ceased work during the reference period, are included. Some employees, who were paid for a weekly attendance of less than 30 hours (e.g. aircrews, teachers, university lecturers), are classified as full-time if they worked the normal scheduled hours for a full-time week.

Adults are employees 21 years of age or over and those employees who are under 21 years of age but are paid at the full adult rate for their occupation.

Weekly total earnings refers to earnings of employees in the reference period, before taxation and any other deductions, eg. superannuation, board and lodging, have been made. Earnings comprise overtime earnings, ordinary time earnings, shift allowances, penalty rates, commission and similar payments, and that part of paid annual leave, paid sick leave, long service leave and paid holidays taken during the reference period. Retrospective pay or pay in advance, annual leave loadings and other bonuses not related to the reference period are excluded.

Weekly ordinary time earnings refer to that part of weekly total earnings attributable to award, standard or agreed hours of work. Included in relation to these hours are shift allowances, penalty rates, commissions, bonuses and incentive payments, and one week's proportion of payments for annual and other leave taken during the reference period.

Seasonal Influence: Quarterly figures are affected by seasonal influences. For example, special payments, including prepayments for holiday periods, tend to raise the December quarter and to depress the March quarter averages. Comparisons as to trends are generally best made by relating complete years or corresponding periods of incomplete years. Alternatively, a 'seasonally adjusted' series may be used.

Discontinuance of series: Because of the different conceptual and methodological bases, the new series is not directly comparable with the payroll-tax-based series it replaces.

The following table shows average weekly earnings of male and female full-time employees in Tasmania from December 1982 to June 1984:

Average	Weekly	<b>Earnings</b>	of	Employees,	Tasmania	(a) r
			18	١		

		Males			Females			Persons		
	Full-time adults		All males	Full-time adults		All females	Full-time adults		am All	
Quarter	Weekly ordinary time earnings	Weekly total earnings	Weekly total earnings	Weekly ordinary time earnings	Weekly total earnings	Weekly total earnings	Weekly ordinary time earnings	Weekly total earnings	employees  Weekly  total  earnings	
1982— December	339.40	352.60	321.10	284.40	288.60	188.30	326.00	337.30	267.00	
1983—	337.40	332.00	321.10	204.40	200.00	100.30	320.00	337.30	207.00	
March	347.40 355.00	359.90 371.70	333.00 337.10	287.80 285.70	292.80 290.50	202.70 190.10	333.10 339.70	344.40 354.30	284.90 280.40	
September	346.30 357.40	360.70 376.30	329.30 347.00	290.30 303.10	294.80 308.10	211.30 223.30	330.90 342.40	342.60 357.50	282.30 297.20	
1984				303.10	500.10	223.30	312.10	331.30	277.20	
March	366.60 381.00	387.50 401.30	358.10 371.40	309.10 323.10	314.80 328.10	233.10 245.20	350.60 364.50	367.30 380.40	309.20 321.10	

<sup>(</sup>a) Estimates are derived from the employer based Average Weekly Earnings survey introduced in the December quarter 1983 replacing the interim employer based Quarterly Survey of Earnings which in turn replaced the pay-roll tax based collection in the September quarter 1981. These results are not strictly comparable with those previously derived from the payroll-tax-based series because of the different conceptual and methodological bases of the two series. Figures are rounded to the nearest ten cents.

The next table, giving index numbers for average weekly earnings by year for each of the States, provides a comparison of wage movements between States:

Average Weekly Earnings: Index Numbers by States and Australia (a)

Period	NSW	Vic.	Qld	WA	SA	Tas.	NT	ACT	Aust.
1978-79	75.6	74.8	75.5	75.3	76.3	73.1	71.5	74.4	75.1
1979-80	83.5	82.1	81.3	82.6	83.5	82.3	79.9	80.6	82.4
1980-81	94.5	92.6	93.7	94.1	94.9	93.3	94.5	89.6	93.5
1981-82	106.6	107.7	107.7	108.3	105.7	106.6	n.a.	n.a.	107.1
1982-83	117.0	122.4	118.9	122.7	117.9	120.6	n.a.	118.9	119.3
1983-84	127.0	133.4	127.9	132.4	124.6	129.7	n.a.	123.9	129.4

<sup>(</sup>a) For definitions, see the section preceding the tables. Base: September Quarter 1981 = 100.0.

## **WAGE-FIXING AUTHORITIES**

#### **Tasmanian Industrial Boards**

## History

The evolution of the Tasmanian Wages Boards system is described in the 1968 Year Book. On 22 December 1975, Royal Assent was given to the Industrial Relations Act 1975. The new Act superseded the Wages Board Act 1920, replacing Wages Boards with Industrial Boards; the more important changes embodied in it are outlined in the 1977 Year Book. The following sections summarise the current situation.

#### Tasmanian Industrial Boards

The Tasmanian Industrial Boards are the wage-fixing Authorities for all employers whose employees are not covered by Federal or Public Service Board awards (approximately 70 000 employees in this State). The Chairman, Deputy Chairman and Assistant Deputy Chairman of Industrial Boards are Government-appointed and act as chairmen on approximately 70 Tasmanian Industrial Boards. Supporting staff are officers of the Department of Labour and Industry.

Establishment and Constitution of Industrial Boards

Boards are established, by order of the Governor, for particular industries. The constitutional nexus of a Board is the industry of the employer, not the common occupation of the employees, as is the case under other authorities.

Each Board, of which there are about 70 in active existence, consists of an equal number of employer and employee representatives, and a Chairman. The Chairman is the Chairman of Industrial Boards, or at his direction, the Deputy Chairman of Industrial Boards or the Assistant Deputy Chairman. Board members are appointed by the responsible Minister; at least one-half (on either side) of the representatives must be employed in the industry within the Board's jurisdiction.

Board members are appointed to a three-year term of office.

## Function of Boards

The function of Industrial Boards is to make awards prescribing minimum wage rates and conditions of employment that must be observed by all employers in the industries within the particular Board's jurisdiction. (An 'Industry' is defined in the Act as any industry, trade, business, undertaking, profession, calling, function, process or work performed, carried on, or engaged in by an employer.) Examples are the Mining (Lead-Zinc) Industrial Board, which is established in respect of the industry of mining and processing of silver-lead-zinc ore; the Dentists' Industrial Board, established in respect of dentists and dental mechanics, and hence covering persons employed in those industries; and the Shipbuilders' Industrial Board, established in respect of the industry of constructing, altering, or repairing ships or boats, and dunnaging of ships' holds.

An award cannot contain any matter relating to: the opening or closing hours of an employer's business premises; the granting of long service leave; a bonus payment made at the discretion of an employer; or a superannuation scheme.

Awards may be made to have retrospective effect, and may be made to remain in force for a specific period. Awards may replace, rescind or amend an existing award, and are subject to the Apprentices Act 1942, the Long Service Leave Act 1956, the Public Health Act 1962, the Mines Inspection Act 1968 and the Industrial Safety, Health and Welfare Act 1977.

Meetings of Boards are normally convened by the Chairman of Industrial Boards but the responsible Minister (the Minister for Industrial Relations) may convene a Board meeting for the purpose of settling or preventing an industrial dispute.

Variations to Awards Without a Meeting of a Board

Under Section 30 of the Act, the Chairman may make an award amending a previous award, without the convening of a meeting of the Board, upon written application from all representative members of the Board for the particular amendment.

Under Section 31 the Chairman can make a Common Rule Award, where the provisions of at least five awards are affected.

On receipt of an application, a notice is published in the daily press. A hearing is then conducted, at which the submissions of employer and employee organisations are considered by the Chairman. Following the hearing, the Chairman may make a Common Rule Award.

This award may only relate to the following matters: a basic wage, a minimum wage, standard hours of work, paid leave of absence, and any matter that is determined in an award made under the *Federal Conciliation and Arbitration Act* 1904 that affects or relates to industries in which at least five Boards have jurisdiction. However, this restriction is removed if the award is made on joint application from the Tasmanian Trades and Labour Council and an appropriate employer organisation (usually the Tasmanian Chamber of Industries). An example of a Common Rule Award is an award made following a 'National Wage' decision of the Federal Conciliation and Arbitration Commission.

## Industrial Agreements

Under Section 32 of the Act, an industrial agreement may be made, for the purpose of resolving an industrial matter that does not extend to the whole of an industry within the jurisdiction of a Board. When the Chairman satisfies himself that the agreement has been executed by, or on behalf of, all parties involved in the matter, and that the provisions of the agreement are in line with appropriate award provisions, the Chairman 'shall certify that agreement as an award having like effect under this Act'.

## Industrial Appeals Tribunal

This Tribunal was set up to provide for appeals against a determination made by a Board or the Chairman to include, or refuse to include, any specified provision in any award or to refuse to make an award on any specified matter. Such appeals must be made within 21 days of the making of a determination. After hearing the appeal, the Tribunal (unless it dismisses the appeal) may reverse or vary the determination in respect of which the appeal is brought; and to give effect to its decision the Tribunal may vary or revoke an award, or make a new award.

A decision of the Tribunal can be challenged only on the grounds of illegality by application to the Supreme Court.

## Compulsory Conferences

Under Section 50 of the Act, the Minister may call a compulsory conference for the purpose of settling or preventing an industrial dispute.

The Minister may summons any person whose presence may help prevent or settle a dispute.

The compulsory conference is presided over by a person directed by the Minister to undertake such duty; in practice this person is usually the Chairman, Deputy Chairman or Assistant Deputy Chairman of Industrial Boards.

If, after considering the views expressed at the conference, the President is of the opinion that certain action should be taken to effect the aim of the conference (viz. to settle or prevent an industrial dispute), then he may, by written order, direct such action to be taken.

#### Tasmanian Public Service Board

## General

The Public Service Act 1973 established two new industrial authorities, the Public Service Board and Public Service Arbitrator (for details see the next section) to deal with awards, working conditions, etc., for employees of the State Government and certain State authorities. The Public Service Board comprises three Commissioners appointed by the Governor for terms not exceeding five years. One of the three Commissioners is appointed Chairman of the Board. In addition to members of the State Public Service, the Board's jurisdiction includes persons employed in the teaching service, police force, parliamentary staff positions, public hospitals, non-academic staff of the College of Advanced Education and various State authorities.

The Public Service Board Department is the personnel authority for the Public Service and is required to examine the business of each department's activities and business methods to find ways of economising and promoting efficiency in the management and working of departments. The work of the Public Service Board Department, therefore, involves inspections and the recruitment, appointment, salary classification, training and promotion and disciplinary supervision of all persons employed under the *Public Service Act* 1973.

#### Industrial Functions

The Public Service Board may make awards covering wages, salaries and conditions of work for employees falling within its jurisdiction. A main function of the Board is

determining 'principal awards', i.e. an award which covers all employees within the scope of a particular group such as administrative and clerical officers. The determining of a principal award involves a complete review of the wages and salaries and other work conditions of all positions within the scope of the particular award.

Unless revoked, a principal award is effective for three years. However, during the currency of a principal award it may be amended by the Board to eliminate anomalies, errors or defects contained in it, to incorporate determinations of the Federal Conciliation and Arbitration Commission (e.g. national wage case decisions, etc.), or for a number of other reasons.

## The Tasmanian Public Service Arbitrator

The Public Service Arbitrator, appointed by the Governor for a term not exceeding five years, has the same area of jurisdiction as the Public Service Board. Applications to the Arbitrator for arbitration on awards may be made where the Public Service Board has: refused an application for an award; made an award (including an award to supplement a consent award); or allowed three months or longer to elapse after an application has been made for an award without refusing the application or making an award (including a consent award). Such applications are lodged with the registrar and the Arbitrator. After he has been satisfied that the applicant is entitled to apply for arbitration, the Arbitrator arranges to hear the applicant and others affected by the award. After hearing and considering an application he may: refuse the application; confirm the award or any of its provisions; direct the Board to vary the award by omitting, altering or adding to the award's provisions; or where it has refused or failed to make an award, to make an award in specified terms.

The Public Service Arbitrator has an additional function of reviewing individual salary classifications made by any controlling authority following the handing down of any new principal award. Applications for consideration of particular salary classifications may be made by any registered employee organisation in respect of any office or position held by any of its members. In addition, the State Employees (Long Service Leave) Act 1950 was amended on 19 September 1974. A new section provided for the settlement of any dispute as to whether or when an employee is or has become entitled to leave of absence or an allowance in lieu, or whether a deceased employee's personal representative is or has become entitled to payment of an allowance. The section stipulates that the Public Service Arbitrator shall hear and determine all such disputes.

## Tasmanian Industrial Relations Act 1984

The Public Service Board and Tasmanian Public Service Arbitrator will be abolished with the introduction of the *Tasmanian Industrial Relations Act* 1984 and the *Tasmanian State Service Act* 1984.

The Industrial Relations Act 1984, which was proclaimed in January 1985, established the State Industrial Commission which took over the industrial functions of the Public Service Board and the Award arbitration functions of the Tasmanian Public Service Arbitrator.

The Tasmanian State Service Act 1984, to be proclaimed in April 1985, will result in the abolition of the Public Service Board and its replacement by three agencies: Department of Public Administration; Commissioner for Public Employment; and Commissioner for Review.

Employing powers, previously vested in the Governor on the recommendation of the Public Service Board, will be with Ministers who will have the power to delegate this authority to Heads of Agencies. The Commissioner for Review will assume, among other things, the responsibilities of the Public Service Arbitrator as they related to the review of individual salary classifications.

## **INDUSTRIAL DISPUTES**

Statistics of industrial disputes refer only to those involving a stoppage of work of 10 man-days or more. The information is compiled from the following sources: direct from employers and trade unions; reports from government departments and authorities; reports from State and federal industrial authorities; and information contained in trade journals, newspapers, etc. Particulars of some stoppages are estimated and the following statistics should be regarded as giving only a broad measure of industrial stoppages. The details relating to workers involved and working days lost are in respect of those thrown out of work at the establishments where the stoppages actually occurred.

Industrial Disputes (a): Tasmania and Australia

Period		outes aber)		days lost 00)	Working days lost per thousand employees		
-	Tasmania	Australia	Tasmania	Australia	Tasmania	Australia	
1978	46	2 277	35.4	2 130.8	n.a.	n.a.	
1979	53	2 042	59.8	3 964.4	n.a.	n.a.	
1980	52	2 429	91.5	3 320.2	659	650	
1981	88	2 9 1 5	64.3	4 192.2	456	800	
982	48	2 060	61.5	2 158.0	432	396	
1983	54	1 787	67.8	1 641.4	471	249	
June 1983	54	1 846	53.9	1 999.6	346	298	
June 1984	58	1 856	73.3	1 293.6	535	248	

(a) Refers to all disputes in progress during the period. Statistics relate to stoppages involving 10 man-days or more in the establishments where the stoppages occurred only.

## **Further References**

ABS Publications Produced by the Tasmanian Office

Labour Force Statistics, Tasmania (6201.6), annual. Labour Related Statistics, Tasmania (6302.6), annual. Industrial Accidents, Tasmania (6301.6), annual.

ABS Publications Produced by the Canberra Office

A Guide to Labour Statistics (6102.0), irregular. The Labour Force, Australia (6203.0), monthly. The Labour Force, Australia (6204.0), annual.

Labour Statistics, Australia (6101.0), annual.

Employed Wage and Salary Earners, Australia (6248.0), quarterly. Average Weekly Earnings, States and Australia (6302.0), quarterly. Award Rates of Pay Indexes, Australia (6312.0), monthly.

Industrial Disputes, Australia (6322.0), annual.

Trade Union Statistics, Australia (6323.0), annual.

# **CHAPTER 10**

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# Chapter 10

## **PRICES**

## PRICE INDEXES

Retail Price Index Numbers from 1901

Retail prices of food and groceries and average rentals of houses for periods extending back to the year 1901 were collected by the Australian Statistician. A continuous price series from 1901 to the present day (shown in part below) has been constructed from the various indexes in use during this period to provide a *broad indication* of long-term trends in retail price levels for Australia. The index numbers are derived by linking a number of indexes that differ greatly in scope. The successive indexes used are 1901-1914, the 'A' Series; from 1914 to 1946-47, the 'C' Series; from 1946-47 to 1948-49, a composite of Consumer Price Index Housing Group (partly estimated) and 'C' Series excluding rent; and from 1948-49, the Consumer Price Index.

Retail Price Index Numbers from 1901: Six State Capital Cities Combined (Base: Year 1911 = 100)

Year	Index number	Percent- age change (a)		Year	Index number	Percent- age change (a)		Year	Index number	Percent- age change (a)
1901	88		1946		190	+ 1.6	1977		1.216	+12.3
1911	100	+ 3.1	1951		313	+19.5		(c)		+ 7.9
1921 (b)	168	-13.0	1956		419	+ 6.3		(c)		+ 9.1
1926		+ 1.8	1961	***************************************	471	+ 2.6		(-)		+10.3
1931		-10.5	1966		517	+ 3.0	1981		1 731	+ 9.7
1936		+ 2.2	1971		621	+ 6.0	1982	***************************************	1 923	+11.1
1941	167	+ 5.0	1974		829	+15.1				+10.1

- (a) Over previous year (previous year's figures not necessarily shown in table).
- (b) November; remaining figures are averages for the respective years.
- (c) Affected by changes in the financing of health services.

#### **Consumer Price Index**

The Consumer Price Index (CPI) measures quarterly changes in the price of a constant 'basket' of goods and services which account for a high proportion of expenditures by metropolitan wage and salary households. The CPI is described as a chain of 'fixed weight aggregative' linked indexes. Significant changes in the weighting pattern have been made at approximately five-yearly intervals to take account of changes in household spending patterns. However, during each period between links, the range of items included and their quantity weights remain fixed (i.e. the 'quantity' for each type of item included in the 'basket' for calculation of the CPI does not change between linking dates)—base-weighted indexes of this type are referred to as Laspeyre's indexes. The percentage contributions of items to the CPI (often described as 'value weights') change continually from quarter to quarter because of relative price movements which tend to differ from one item to another. The next table shows the percentage contributions of the various groups and sub-groups to the CPI as at the June quarter 1983:

# Consumer Price Index, Hobart, Percentage Contributions to the Total CPI (a)

	As at June quarter 1983			
Group, Sub-group, etc.	Sub-group, etc.	Group		
Food				
Dairy produce	2.006			
Cereal products	2.081			
Meat and seafoods—Meat	4.748			
Fish	0.315			
Fruit and vegetables—Fresh fruit and vegetables	1.396	21.313		
Processed fruit and vegetables	0.997			
Soft drinks, ice-cream and confectionery	2.831			
Meals out, take away food	4.924			
Other food	2.015			
Clothing—				
Men's and boys' clothing	2.947			
Women's and girls' clothing	3.963			
Piecegoods and other clothing	0.442	9.324		
Footwear	1.501			
Clothing and footwear services	0.471			
Housing—				
Rent—Privately owned dwellings	2.548			
Government owned dwellings	0.383			
Home ownership—Local government rates and charges	1.657	11.753		
Other home ownership	7.165			
Household equipment and operation—	2.025			
Fuel and light	2.825			
Furniture and floor coverings	2.487			
Appliances	1.060	12 227		
Drapery	1.035	13.227		
Household utensils and tools	1.385			
Household supplies and services	3.216 1.219			
	1.219			
Fransportation— Private transport—Motor vehicle purchase	4.160			
Automotive fuel	4.973	15.464		
Other motoring costs	5.467	15.404		
Urban transport fares	0.864			
	0.004			
Fobacco and alcohol— Alcoholic beverages—Beer	4.698			
Wine and spirits	1.475	8.870		
Cigarettes and tobacco	2.697	0.070		
Health and personal care—				
Health services	5.541			
Personal care products	1.957	8.299		
Personal care services	0.801	*		
Recreation and education—				
Books, newspapers, magazines	1.408			
Other recreation goods	2.179			
Holiday, travel and accommodation	5.225	11.750		
Other recreation services	1.854			
Education and child care	1.084			

<sup>(</sup>a) Percentage contributions shown are based on estimates of household expenditure for the year 1979-80, valued at June quarter 1983 prices.

#### Consumer Price Index. Hobart

The Consumer Price Index for Hobart is compiled to base 1980-81 = 100.0, the number 100.0 being the base value for each of the major groups and also for the 'All groups' index (except for 'Recreation and education', base: March quarter 1982 = 100.0).

The following table shows group index numbers for Hobart on a financial year and quarterly basis (an annual index number is the average of the four respective quarterly index numbers):

Consumer Price Index: Hobart (a) (Base of Each Index: Year 1980-81 = 100.0) (b)

Year or quarter         Food Clothing Propertion (Clothing Propertion)         House-hold equip-ment and operation         Trans-port and ation alcohol care education (c)         Health and personal and education (c)         Recreation           1978-79 (d) 80.3 86.7 r 88.2 82.4 79.7 86.4 82.9 n.a.         82.9 n.a.         n.a.           1979-80 (d) 91.6 93.1 r 93.1 89.8 90.6 93.1 90.7 n.a.         90.6 93.1 90.7 n.a.	
	All groups
	r 83.1
	r 91.6
1980-81 100.0 100.0 100.0 100.0 100.0 100.0 100.0 n.a.	100.0
1981-82 108.7 106.4 107.4 110.0 112.8 109.1 120.5 n.a.	110.0
1982-83 118.6 112.8 116.3 121.7 126.8 124.0 143.0 109.4	121.8
1983-84 (d) 128.2 119.5 123.9 132.8 136.7 137.8 131.5 117.3	129.9
1983—	
March 118.7 112.7 117.5 123.9 129.7 126.0 146.2 112.6	123.5
June 123.7 116.2 118.6 126.6 130.4 127.5 147.1 113.7	125.9
September 125.3 116.6 120.0 128.3 133.5 129.7 147.4 114.9	127.5
December 127.8 118.7 122.9 132.1 136.3 136.4 148.0 116.3	130.4
1984—	
March 129.0 119.6 125.3 134.6 139.0 141.3 122.0 118.8	130.7
June	130.9

#### Percentage Change June Quarter 1984 over June Quarter 1983

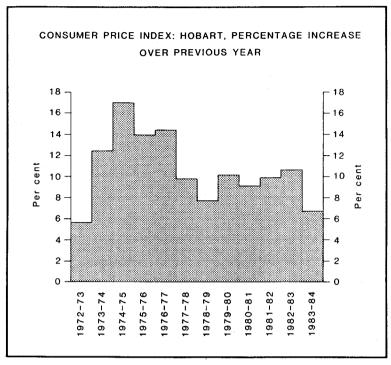
+ 5.5 + 5.9	+ 7.3	+ 7.5	+ 5.8	+ 12.7	-26.3	+ 4.7	+ 4.0	

<sup>(</sup>a) Figures after the decimal point have limited significance; they are inserted to avoid the distortions that would occur in rounding.

<sup>(</sup>b) Except 'Recreation and education'. (March quarter 1982 = 100.0).

<sup>(</sup>c) There are significant differences in the composition of the old 'Recreation' group and the new 'Recreation and education' group. Therefore these two series have not been linked at March quarter 1982.

<sup>(</sup>d) The 'Health and personal care' and 'All groups' indexes were affected by changes in the financing of health services.



## Consumer (Retail) Price Indexes, Various Countries

The following table shows consumer (retail) price indexes for selected countries. It should be noted that the items priced and the weighting patterns used in constructing the indexes vary widely from country to country.

Consumer (Retail) Price Indexes: Various Countries (a) (Source: Monthly Bulletin of Statistics of the Statistical Office of the United Nations)

Year	Australia (b)	France	Federal Repub. of Germany	Italy	Japan	New Zealand	Switz- erland	United King- dom	USA
		Index N	umbers (Ba	se of ea	ch index: Y	/ear 1970 =	100.0)		
1978 1979 1980 1981 1982	244.3 269.2 295.3 328.1	199.8 221.3 251.3 285.0 318.7 349.3	149.6 155.8 r 164.1 r 174.5 r 183.6 189.7	265.3 304.5 369.1 441.1 513.7 588.9	r 211.4 r 219.0 r 236.6 248.0 254.6 259.3	243.8 277.1 324.7 374.7 434.9 467.1	150.8 156.2 162.5 173.1 182.8 188.2	269.6 305.8 360.8 403.6 438.3 458.4	167.9 187.2 r 212.2 r 234.2 r 248.6 256.6
			Percentage	Increas	e Over Pre	vious Year			
1978 1979 1980 1981 1982	9.1 10.2 9.7 11.1	9.1 10.8 13.6 13.4 11.8 9.6	2.7 4.1 r 5.3 r 6.3 r 5.2 3.3	12.1 14.8 21.2 19.5 16.5 14.6	3.8 3.6 8.0 r 4.8 2.7 1.8	11.9 13.7 17.2 15.4 16.1 7.4	1.1 3.6 4.0 6.5 5.6 3.0	8.3 13.4 18.0 11.9 8.6 4.6	7.6 11.5 r13.4 r10.4 r 6.1 3.2

<sup>(</sup>a) The items priced and the levels at which they are priced in these indexes vary widely from country to country.

<sup>(</sup>b) Consumer Price Index converted to base: year 1970 = 100.0.

## Average Prices of Foodstuffs, Hobart

The average retail prices of selected foodstuffs in Hobart since 1979 are shown in the next table. The list, while representative of foodstuffs commonly consumed, is not exhaustive. For a description of foodstuffs in the Consumer Price Index regimen, see the earlier table 'Consumer Price Index, Percentage Contributions of the Total Index Aggregate'.

Average Retail Prices of Selected Food Items: Hobart (a) (b) (Cents)

			Cents)				
						19	83
Item .	Unit	1979	1980	1981	1982	Average price	Percentage increase (c)
Groceries, etc.—							
Bread, ordinary							
white, sliced	680 g	57	64	72	79	84	6.3
Flour, self-raising	l kg	55	60	66	76	77	1.3
Tea	250 g	80	77	80	86	103	19.8
Coffee, instant	150 g	270	299	299	312	331	6.1
Sugar	2 kg	85	95	102	116	129	11.2
Rice	500 g	39	38	40	45	44	-2.2
Breakfast cereal,	6		20		,,,		2.2
corn based	500 g	82	89	100	112	118	5.4
Peaches, canned	825 g	76	80	87	99	112	13.1
Potatoes	1 kg	40	45	52	45	60	33.3
Onions	1 kg	53	53	114	78	81	3.8
Dairy produce, etc.—							• • •
Butter	500 g	95	105	119	151	168	11.3
Cheese, processed (d)	500 g	118	136	144	177	225	n.a.
Margarine, table,	C						
poly-unsaturated	500 g	92	93	102	110	110	_
Eggs		139	148	161	169	178	5.3
Bacon, rashers, pre-	(6)						
pack	250 g	150	171	183	205	218	6.3
Milk, fresh, bottled,							
delivered	2-600 ml	49	54	64	71	78	9.9
Meat			•	•			
Beef							
Rump steak	1 kg	580	660	666	658	742	12.8
Silverside, corned	l kg	380	442	448	442	500	13.1
Lamb-	J						
Leg	1 kg	333	358	358	359	376	4.7
Loin chops	1 kg	349	371	379	374	414	10.7
Pork, leg	1 kg	415	464	490	540	536	-0.7

<sup>(</sup>a) The table units are not necessarily those for which the original price data were obtained; in such cases, prices have been calculated for the table unit.

## Wholesale Price Indexes

#### General

The Bureau compiles several wholesale price indexes of basic materials. These include the 'Price Index of Materials used in House Building' and the 'Price Index of Materials used in Building other than House Building'. The Price Index of Materials Used in the Manufacturing Industry (for Australia) was first published by the Bureau in July 1975 and the Price Index of Articles Produced by Manufacturing Industry in October 1976.

## Wholesale Price Index of Materials Used in House Building

General: This index is complementary to the 'Other than House Building' index and measures the change in prices of selected materials used in house construction.

<sup>(</sup>b) Prices are the averages of the recorded prices for the four quarters of each calendar year.

<sup>(</sup>c) Over the corresponding average 1981 price.

<sup>(</sup>d) As from 1983, sliced and wrapped. Not comparable with earlier years.

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Scope and Composition: The materials selected and weights given to the items were in accordance with the usage of materials in a sample of representative house types constructed in or about 1968-69. The house types included in the sample were those using brick, brick veneer, timber or asbestos-cement sheeting for the outer-walls. Within the four major construction types, account was taken of a range of characteristics, e.g. material used for internal partitions, window frames, roofs, etc. The number of items included in the index range from 49 (Brisbane) to 51 (Perth). The items are combined into 11 groups; an 'All groups' index is also published. Standards are fixed and price movements are for items of a constant quality.

Derivation of Items and Weights: The index is a fixed quantity weights index and is calculated by the method known as the 'weighted arithmetic mean of price relatives'. The items and weights used are based on the reported values of materials used in the selected houses in each State capital city urban area. Information about materials used and their value was obtained for a total of 114 houses. The material values derived for each State capital city were then used to develop weighting patterns for the individual cities and aggregated to give a weighting pattern for the six State capital cities combined.

Base Period: The index has a base year 1966-67 = 100.0 but the weighting pattern is more appropriate to material usage during 1968-69.

*Prices:* Prices relate to specified standards for each commodity and are obtained in all State capital city urban areas from representative suppliers of materials used in house building. The prices are collected as at the mid-point of the month to which the index refers

Index Numbers: The index has been compiled for each month from July 1966 and for financial years from 1966-67. Index numbers are published for each group and combined into an 'All groups' number for each State capital cities combined.

The following table compares movements in the index numbers for each of the six capital cities and six capitals combined for recent years. (The separate city indexes allow comparisons to be drawn between capital city areas as to differences in the degree of price movement from period to period, but not as to differences in price levels.)

Price Index of Materials Used in House Building All Groups Index Numbers: Six State Capital Cities (Base of Each Index: Year 1966-67 = 100.0)

Year or			State ca	pital cities			Six capitals (a)		
(month)	Sydney	Mel- bourne	Brisbane	Adelaide	Perth	Hobart	Index number	Percentage change (b)	
1978-79	272.7	251.4	281.3	292.1	268.2	273.6	268.1	+ 6.4	
1979-80	309.5	283.4	315.0	338.5	299.4	304.2	302.9	+ 13.0	
1980-81	347.6	324.7	363.7	386.1	337.6	338.2	344.0	+ 13.6	
1981-82	378.3	r 355.0	407.2	427.2	373.2	371.7	r 377.8	r + 9.8	
1982-83	408.6	r 392.1	r 447.7	r 480.2	r 409.0	r 405.7	r 414.2	r + 9.6	
1983-84 p	434.0	430.4	484.5	519.4	437.4	440.1	446.7	+ 7.8	
1983—									
March r	412.7	401.7	454.1	488.3	414.0	406.2	420.7	+ 2.4	
June r	421.3	406.2	460.6	500.4	416.8	422.7	427.3	+ 1.6	
September p		414.6	468.5	507.7	427.1	428.9	434.0	+ 1.6	
December p		426.0	483.6	517.2	435.8	432.7	443.2	+ 2.1	
1984—									
March p	442.0	445.3	496.6	529.7	444.9	449.3	457.4	+ 3.2	
June p '		453.2	501.8	543.1	453.4	465.4	466.1	+ 1.9	
		Percento	ige Change	June 1984	Over June	e 1983			
	+ 7.1	+ 11.6	+ 8.9	+ 8.5	+ 8.8	+ 10.1	+ 9.1	_	

<sup>(</sup>a) Weighted average of six State capital cities. (b) Over preceding year or preceding month shown.

Price Index of Materials Used in Building Other Than House Building

General: The index measures changes in the prices of selected materials used in the construction of buildings other than houses and 'low-rise' flats (in general, those up to three storeys). The original index had a reference base as the year 1966-67 = 100.0. This has been replaced with the publication in March 1981 of a revised index with a reference base as the year 1979-80 = 100.0.

Prices: Price series used relate to specified standards of each commodity and are obtained in all State capital city urban areas from representative supplies of materials used in building. The prices are collected as at the mid-point of the month to which the index refers, or as near thereto as practicable. There are some exceptions to the use of local prices in the indexes for each capital city area. In a few cases where suitable price series are not currently available for an item in a given city, imputation is necessary. For each capital city area, the whole of the group 'electrical installation materials' and the majority of the items in the group 'mechanical services components' were based on Sydney and Melbourne price series for the compilation of the original index. In the revised index, certain commodities that comprise the group 'electrical materials' are now priced in Hobart.

Revised Price Index: A review of the Price Index of Materials Used in Building Other Than House Building was completed in March 1981 with publication of index numbers compiled on a monthly basis from July 1979. The reference base of the revised index is the year 1979-80 = 100.0. As for the original index the revised index is also a fixed quantity weights index and is calculated by the method known as the 'weighted arithmetic mean of price relatives'.

The composition of the index is in accordance with the estimated average values of materials used in the construction of buildings (other than houses) commenced in the six State capital cities in the three years ended June 1977. The index comprises 68 items combined in 10 industry of origin groups in addition to an 'all groups' index. Items are described in terms of fixed specifications with the aim of recording price changes for representative materials of constant quality.

Price Index of Materials Used in Building Other Than House Building Special Combinations of Building Materials Index Numbers, Hobart (Base of Each Index: Year 1979-80 = 100.0)

Year or month	All electrical materials	All mechanical services	All plumbing materials	All groups excluding electri- cal materials and mechanical services	All groups
1979-80	100.0	100.0	100.0	100.0	100.0
1980-81	110.1	112.8	111.5	111.6	111.6
1981-82	121.7	125.9	120.8	122.5	122.9
1982-83	141.4	r 140.5	131.1	r 134.5	r 136.1
1983-84 p	156.2	149.9	142.6	144.3	146.2
1983—					
March	145.5	r 142.4	133.8	r 136.3	r 138.1
June	149.7	r 144.7	136.5	r 139.9	r 141.5
September p	154.6	148.6	140.0	141.7	143.9
December p	155.4	150.1	142.5	144.3	146.2
1984					
March p	159.0	150.9	144.4	145.8	147.8
June p	160.1	153.7	146.3	148.3	150.2
	Perce	entage Change Jun	e 1984 Over Jui	ne 1983	
	+ 6.9	+ 6.2	+ 7.2	+ 6.0	+ 6.1

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The following table compares movements in the 'all groups' index numbers for each of the six State capital cities and the six capitals combined:

# Price Index of Materials Used in Building Other Than House Building All Groups Index Numbers: Six State Capital Cities (Base of each Index: Year 1979-80 = 100.0)

Year or month	State capital cities							Six capitals (a)	
	Sydney	Mel- bourne	Brisbane	Perth	Adelaide	Hobart	Index Number	Per- centage change (b)	
1979-80	100.0	100.0	100.0	100.0	100.0	100.0	100.0	+ 13.0	
1980-81	113.1	112.7	113.2	112.2	113.8	111.6	112.9	+ 12.9	
1981-82	126.6	r123.5	126.3	123.8	127.4	122.9	125.4	+ 11.1	
1982-83 r	141.4	136.0	141.7	138.8	. 144.3	136.1	139.8	+ 11.5	
1983-84	148.8	143.9	152.5	146.4	153.5	146.2	148.1	+ 5.9	
1983—									
March r	142.8	137.7	144.0	140.2	146.9	138.1	141.6	+ 1.4	
June r	144.6	138.8	146.7	142.3	148.9	141.5	143.3	+ 1.2	
September p .	146.4	140.4	149.2	144.2	150.8	143.9	145.2	+ 1.3	
December p	148.5	143.4	152.3	146.3	153.2	146.2	147.7	+ 1.7	
1984—									
March p	150.5	146.3	154.9	148.0	155.4	147.8	150.0	+ 1.6	
June p	152.7	148.5	157.0	149.6	158.3	150.2	152.2	+ 1.5	
		Percentag	e Change Ju	ne 1984 O	ver June 19	83	:		
	+ 5.6	+ 7.0	+ 7.0	+ 5.1	+ 6.3	+ 6.1	+ 6.2		

<sup>(</sup>a) Weighted average of six State capital cities.

## **Further References**

ABS Publications

AG Guide to the Consumer Price Index (6440.0).

Consumer Price Index (6401.0), quarterly.

Average Retail Prices of Selected Items, Eight Capital Cities (6403.0), quarterly.

Price Index of Materials Used in Building Other than House Building (6407.0), monthly.

Price Index of Materials Used in House Building (6408.0), monthly.

Price Index of Materials Used in Manufacturing Industry (6411.0), monthly.

Price Index of Astriales Bedward by Manufacturing Industry (6411.0) monthly.

Price Index of Articles Produced by Manufacturing Industry (6412.0), monthly.

<sup>(</sup>b) Over preceding year or previous month shown.

# **CHAPTER 11**

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# Chapter 11

## HOUSING AND CONSTRUCTION

#### **DWELLING STATISTICS**

#### The 1981 Census

Information concerning the housing of the State's population is obtained from householders' schedules collected during population censuses. Statistics on dwellings derived from the 1981 Census of Population and Housing are included in this chapter. For Census purposes, dwellings are divided into two groups, occupied dwellings and unoccupied dwellings. These are defined below:

## Definitions

Occupied Dwelling: An occupied dwelling is defined as the premises occupied by a household on Census night (for a definition of household see below). Occupied dwellings are further classified into the following two categories:

A private dwelling is normally a house, room or flat but it can also be a tent, houseboat, or a caravan if standing on its own block of land, and not occupied by members of the same household resident in an adjacent dwelling. It is important to note that the total number of dwellings may be more than the total number of known structures in any given area.

Non-private dwellings are hotels, motels, hostels, boarding houses, gaols, religious and charitable institutions, defence establishments and other communal dwellings. Usually, occupants of such dwellings use communal facilities such as hotel dining rooms or mess halls. A caravan in a caravan park (whether there permanently or temporarily) is treated as part of a non-private dwelling, as are self-contained units provided by commercial enterprises such as hotels, motels or guest houses.

Unoccupied Dwelling: An unoccupied dwelling is a structure built specifically for living purposes and capable of being lived in, but unoccupied at the time of the Census. Vacant houses, holiday houses, huts, cabins (other than seasonal workers' quarters) and houseboats are therefore counted as unoccupied dwellings but vacant tents, garages and caravans (if not normally occupied) are not. Only private dwellings can be classified as unoccupied. Unoccupied dwellings include dwellings vacant because they have been newly completed, vacant for demolition or repair, holiday homes, dwellings to let, and dwellings where the household was absent on Census night.

Household: For Census purposes, a household is a group of people who live together as a single domestic unit and eat together, the food eaten by members being served from a common supply. A person living alone is also a household. It is possible, then, for more than one household to live in one house or structure. For example, a lodger who lives with a family and provides all his food for himself is not a member of the family's household but constitutes a separate household and therefore completes a separate Householder's Schedule.

#### Distribution of Dwellings

The following table, shows the distribution of occupied and unoccupied dwellings at 30 June 1976 and 30 June 1981 by local government area:

Number of Occupied and Unoccupied Private Dwellings at 30 June 1976 and 1981

(Statis	overnment Area tical Division ubdivision in		1976 Census		1	981 Census	
	old Type)	Occupied	Unoccupied	Total	Occupied	Unoccupied	Total
Hobart	(H)	17 693	1 342	19 035	17 941	1 519	19 460
Glenorchy	(H)	12 825	556	13 381	13 860	588	14 448
Clarence	(H)	11 940	866	12 806	13 560	911	14 471
Brighton	(H) (S)	1 333	40	1 373	2 573	145	2718
Kingborough	(H) (S)	4 165	332	4 497	5 422	422	5 844
New Norfolk Sorell	(H) (S)	2 568	181	2 749	2 708	224	2 932
Bothwell	(H) (S) (S)	1 413	1 413	2 826	1 818	1 443	3 261
Bruny	(S)	253 123	669 303	922 426	254 157	842	1 096
Esperance	(S)	966	294	1 260	1 005	348 371	505 1 376
Glamorgan	(S)	452	448	900	582	507	1 089
Green Ponds	(S)	261	23	284	312	22	334
Hamilton	(S)	953	165	1 118	763	287	1 050
Huon	(S)	1 385	110	1 495	1 465	102	1 567
Oatlands	(S)	675	152	827	677	149	826
Port Cygnet Richmond	(S)	617	239	856	732	284	1 016
Spring Bay	(S) (S)	523 541	76 281	599	600	73	673
Tasman	(S)	327	458	822 785	619 408	353 528	972 936
***************************************	(0)		430	763	400	346	930
		50 116 8 897	4 279 3 669	54 395 12 566	55 844 9 612	4 743 4 375	60 587 13 987
·.							
Resconsfield		11 297	871	12 168	11 456	918	12 374
	•••••	3 768 1 479	709 231	4 477 1 710	4 400 1 609	746	5 146
	••••••	463	74	537	587	253 46	1 862
George Town	•••••	1 765	524	2 289	2 043	593	2 636
Lilydale		2 391	100	2 491	2 664	166	2 830
		1 630	150	1 780	1 839	146	1 985
St Leonards		5 246	275	5 521	6 237	319	6 556
		1 660 <b>29 699</b>	131 3 065	1 791 32 764	2 079 <b>32 914</b>	159 <b>3 346</b>	2 238 <b>36 260</b>
		495	107	602	496	138	634
		897 303	305 78	1 202 381	974 344	310	1 284 454
	***************************************	567	602	1 169	772	110 799	1 571
	•••••	703	165	868	753	145	898
Ross	••••••	173	72	245	168	81	249
Scottsdale		1 226	328	1 554	1 422	317	1 739
North Eastern		4 364	1 657	6 021	4 929	1 900	6 829
NORTHERN		34 063	4 722	38 785	37 843	5 246	43 089
Burnie		5 762	359	6 121	6 382	459	6 841
Circular Head		2 197	428	2 625	2 365	455	2 820
		6 565	433	6 998	7 593	510	8 103
Kentish		1 166	130	1 296	1 277	123	1 400
Latrobo		747	122	869	777	114	891
		1 565 1 440	313 106	1 878 1 546	1 754	371	2 125
		3 593	325	3 918	1 601 4 155	124 328	1 725 4 483
Wynyard		3 272	357	3 629	3 682	488	4 170
_	***************************************	26 307	2 573	28 880	29 586	2 972	32 558
		99	29	128	41	1	42
		1 254	127	1 381	1 171	125	1 296
Waratah	***************************************	136 497	113 64	249 561	138	16	154
Zeehan	***************************************	1 198	205	561 1 403	547 1 486	83 204	1 690
	***************************************	3 184	538	3 722	3 383	429	1 690 3 812
MERSEY-LYI	ELL	29 491	3 111	32 602	32 969	3 401	36 370
TASMANIA	·	122 567	15 781	138 348	136 268	17 765	154 033

#### **BUILDING STATISTICS**

#### Scope

The scope of building statistics is restricted to building work in the creation of or significant alteration or addition to structures designed to house people, plant, machinery, vehicles, etc. An alteration or addition is regarded as significant if it is valued on completion at \$10 000 or more. Construction work such as the building of railways, bridges, earthworks, water storages, piers, wharves, etc. is excluded.

Details obtained from public authorities on their construction programs and from building contractors refer to all parts of the State. Details for owner-builders cover only those areas subject to building control by local government authorities; thus some farm buildings are excluded but this does not materially affect the figures.

#### Source of Data

The main statistics relate to building approvals and to building operations (commencements, completions, etc.). The data are derived as follows:

Building Approvals: These comprise approvals by local government authorities for the construction of private buildings and contracts let and day labour projects commenced by public authorities. Details are compiled monthly.

Building Activity: Returns are obtained from building contractors engaged in the erection of new buildings; owner-builders; and Commonwealth, State, local and semi-government authorities. Statistics are compiled at quarterly intervals. From 1980-81 a new quarterly Building Activity Survey replaced the previous quarterly operations census. The difference in concept and comparability of data between the two collections is only minor.

#### **Definitions**

A Dwelling is classified as either a 'House' or an 'Other Dwelling':

- a 'House' is defined as a building which has been designed or adapted so that its prime purpose is to be a single self-contained (i.e. including bathing and cooking facilities) dwelling unit which is completely detached from other buildings, and occupies (except in such cases as dwellings built for employees or families of the owner or lessee of the land) a separate titled block of land;
- an 'Other Dwelling' is defined as a self-contained dwelling unit other than a
  house as defined above. These include flats, home units, semi-detached
  dwellings, villa units, town houses, etc. Number of 'other dwellings'
  refers to the number of new individual dwelling units (e.g. one block of
  flats containing 10 separate flat units would be counted as 10 dwellings).

Contractor-built Houses: Those erected under contract, or in anticipation of sale or rental.

Owner-built: An 'owner-built' house is one erected by the owner (other than a recognised building contractor) or under his direction, without the services of a single contractor responsible for the whole job. Houses built by businesses (other than recognised building contractors) are also included in this category.

Commenced: A building is regarded as having commenced in a particular quarter when the value of work done on that job to the end of the quarter is first reported to be equal to or greater than the following threshold values:

- for house jobs (including alterations and additions to houses), \$2 000;
- for other dwelling and other building jobs (including alterations and additions to other dwellings and other buildings), \$5 000.

However, where advice has been received from the relevant authority that a first inspection has been made on a particular building job, that job is regarded as having

commenced even though the value of work reported by the builder as having been done to the end of the quarter is below the threshold.

Under Construction: A building is regarded as being under construction at the end of a period if it has been commenced but has not been completed, and work on it has not been abandoned.

Value of Building: Approved, commenced, completed, or under construction represents the estimated value of the whole job when completed, excluding the value of the land on which the job is carried out. Site preparation costs are included.

Value of Building Work Done: Represents the estimated value of the building work actually carried out during the period.

All values shown are *current values*, i.e. no adjustment has been made for the substantial rise in building costs over recent years. Some perspective to the increases in values can be gained from the wholesale price indexes of materials used in house building and of materials used in building other than house building for Hobart, and from increases in average weekly earnings per employed male unit for Tasmania (see table appearing later in this Chapter).

## **Building Approvals**

The following two tables show details of building approvals. A distinction is made between 'private' and 'public' and the information is dissected to give separate figures for statistical divisions. In 1983-84, 39 per cent of the total value of building approvals was attributed to the Hobart Division, 6 per cent to the Southern Division, 31 per cent to the Northern Division, and 24 per cent to the Mersey-Lyell Division.

Ruilding	Annrovals	by Statistical Division.	1983-84

Particulars	Hobart	Southern	Northern	Mersey-Lyell	Total Tasmania
		Number			
New dwellings—PrivatePublic	1 080 257	348 16	889 200	670 227	2 987 700
Total	1 337	364	1 089	897	3 687
	Va	lue (\$'000)			
New dwellings—Private	46 167 8 501	10 111 477	33 670 6 194	26 567 7 573	116 515 22 745
dwellings (a)—Private Public	4 098	969 30	2 810	2 360	10 238 30
Other building—PrivatePublic	12 098 18 264	1 197 519	9 543 19 695	9 377 9 457	32 216 47 935
All buildings—PrivatePublic	62 363 26 766	12 277 1 026	46 023 25 888	38 305 17 030	158 968 70 710
Total	89 129	13 303	71 912	55 335	229 678

<sup>(</sup>a) Valued at \$10 000 and over.

Duilding	Approvals,	Tacmania
Dunung	Approvais,	i asmama

Particulars	1978-79	1979-80	1980-81	1981-82	1982-83	1983-84
		Number				
New dwellings—Private Public	2 811 833	2 639 676	2 459 741	2 165 565	2 004 723	2 987 700
Total	3 644	3 315	3 200	2 730	2 727	3 687
		Value (\$'000	9)			
New dwellings—Private  Public  Alterations and additions to	83 508 17 700	81 872 16 772	82 657 19 048	75 298 15 038	73 313 20 236	116 515 22 745
dwellings (a)—Private Public	5 077 12	5 828	6 920 30	7 766 20	7 630 23	10 238 30
Other building—Private Public	30 943 46 176	56 931 34 510	45 384 27 806	47 527 42 844	28 364 33 878	32 216 47 935
All building—PrivatePublic	119 527 63 889	144 631 51 282	134 961 46 884	130 591 57 902	109 307 54 137	158 968 70 710
Total	183 416	195 912	181 845	188 493	163 444	229 678

<sup>(</sup>a) Valued at \$10 000 and over.

## **Building Construction**

## Houses Constructed

The next table shows details of the number and value of houses commenced, completed and under construction for recent years:

Construction of New Houses, Tasmania

	Commenced		Com	pleted	Under construction at end of year	
Year	Number	Value (a)	Number	Value (a)	Number	Value (a)
		(\$m)		(\$m)		(\$m)
1978-79	2 889	88.7	2 617	80.7	1 885	59.3
1979-80	2 395	77.4	2 721	87.2	1 487	49.3
1980-81	2 450	87.5	2 510	88.7	1 220	44.6
1981-82	1 940	70.7	2 010	74.3	1 050	39.0
1982-83	1 690	64.4	1 580	60.0	1 120	42.6
1983-84	2 620	103.7	2 380	91.8	1 330	54.2

## (a) When completed.

The following table shows, for Tasmania, the number of houses built by the public sector for recent years, and distinguishes between those built for public authorities (all types) and those built for private persons:

Number of New Houses Completed for Public Authorities and Private Persons, Tasmania

Year	For public authorities	For private persons	Total	Year	For public authorities	For private persons	Total
1978-79 1979-80 1980-81	479	2 075 2 242 2 060	2 721	1981-82 1982-83 1983-84	270	1 660 1 310 2 000	2 010 1 590 2 380

The principal construction authority in Tasmania is the Housing Division of the State Department of Housing and Construction but 'houses built for public authorities' include construction by, or for, other State and Commonwealth Government departments, instrumentalities, etc.

# Government Dwelling Construction

The Housing Department administers that portion of the *Homes Act* 1935 which relates to the purchase and development of land for housing and the erection of homes for rental and sale. These were initially functions of the Housing Division of the Agricultural Bank of Tasmania but in 1953, a separate Housing Department was established. The Department of Housing and Construction was established in 1977 combining the Housing and Construction Departments. In 1983 the necessary legislation was passed by Parliament to enable the establishment of a separate Housing Department.

The following table shows the aggregate dwellings completed by the State Housing Authority in Tasmania to 30 June 1984:

		to 50 suit	1707			
Type of dwelling	Bed-sitting room	One bedroom	Two bedrooms	Three bedrooms	Four bedrooms	Total
Houses (a)	-	4	761	17 652	182	18 599
Multi-unit flats	1	151	181	27	_	360
Elderly persons' housing	454	1 412	_	_	_	1 866
Other medium density (b)	_	58	1 026	142	_	1 226
Movable (granny) units		29	_	_	_	29
Total dwellings	455	1 654	1 968	17 821	182	22 080

Aggregate Dwellings Completed by State Housing Authorities in Tasmania, to 30 June 1984

Until the 1970s, the dwellings constructed were predominantly detached three bedroom houses but in more recent years there has been a marked increase in the construction of other dwellings including elderly persons' homes. In 1968-69, for example, the Housing Department completed 604 dwellings, all of which were detached houses. In 1982-83, on the other hand, the Housing Department completed 556 dwellings comprising 236 houses, 242 elderly persons' homes and 78 other medium density dwellings.

During 1983-84 the Housing Department continued to reduce outer-suburban housing developments with a corresponding increase in urban infill construction. The Department also began a spot purchase program whereby privately built dwellings are purchased to form part of the Department's dwelling stock. This program resulted in the purchase of 136 dwellings in 1983-84 and this is expected to increase to approximately 145 dwellings in 1984-85.

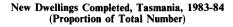
# Construction of New Houses and Other New Dwellings

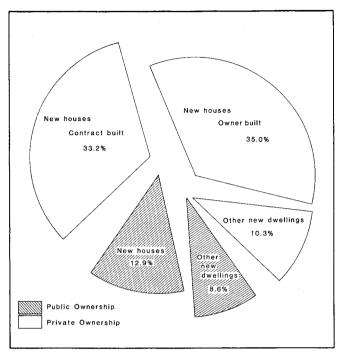
The figures on dwelling construction for recent years show an increasing proportion of new dwellings in the form of flats, units, etc. In 1983-84, 'other new dwellings' comprised 19 per cent of the total number of dwellings completed compared to only 15 per cent in 1969-70.

The pie chart which follows shows the number of new houses and other new dwellings completed, dissected by type of ownership, as a proportion of the total number of dwellings completed:

<sup>(</sup>a) Includes seven houses used for community activities.

<sup>(</sup>b) Includes one villa used for community activities.





In the following table, details are given of completions of new houses and other new dwellings for recent years:

New Houses and Other New Dwellings Completed, Tasmania

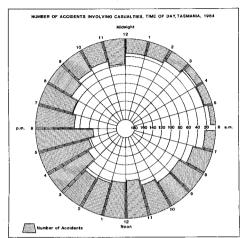
Particulars	1978-79	1979-80	1980-81	1981-82	1982-83	1983-84
		Number				
New houses—						
Public ownership—						
Contract-built	221	247	176	171	149	241
Day labour	321	232	274	181	121	137
Private ownership—						
Contract-built	987	1 016	1 210	790	510	980
Owner-built	1 088	1 226	850	860	810	1 030
Total houses (a)	2 617	2 721	2 510	2 010	1 580	2 380
Other new dwellings (b)	875	882	993	734	765	556
Total houses and						
other dwellings (c).	3 492	3 603	3 500	2 740	2 350	2 940
		Value (\$'00e	0)			
New houses	80 718	87 189	88 700	74 300	60 000	91 800
Other new dwellings	18 742	19 264	22 875	19 109	18 966	15 536

<sup>(</sup>a) From 1980-81 'Total houses' is rounded to the nearest ten units.

<sup>(</sup>b) Individual dwelling units.

<sup>(</sup>c) From 1980-81 'Total houses and other dwellings' is rounded to the nearest ten units.

The following graph shows the number and value of new dwellings completed from 1970-71 to 1983-84. As noted earlier, all values shown in this section are *current values*.



New Dwellings Completed (a), Tasmania

(a) Alterations and additions valued at \$10 000 or more are included to 1972-73 but excluded from 1973-74.

The following three tables show the value of all buildings completed by ownership and class of building:

Value of all Buildings Completed: Private Ownership by Type, Tasmania (\$'000)

		(=)				
Type of building	1978-79	1979-80	1980-81 (a)	1981-82	1982-83	1983-84
New houses	68 450	76 287	75 000	64 600	52 000	79 300
Other new dwellings	13 277	11 417	14 032	11 626	10 261	8 613
Total new dwellings	81 727	87 703	89 000	76 200	62 200	87 900
Alterations and additions						
to dwellings (b)	4 776	5 356	6 700	8 300	8 500	8 400
Hotels, etc.	6 436	4 653	2 799	18 934	891	1 757
Shops	7 155	14 787	26 927	9 694	11 383	5 609
Factories	7 299	5 809	12 115	4 828	4 492	3 648
Offices	7 599	5 757	3 390	7 466	8 190	5 972
Other business premises	5 021	3 269	7 318	6 303	2 428	2 990
Education	1 515	1 029	2 061	1 434	4 193	4 329
Religion	910	627	1 075	981	972	394
Health	377	4 007	1 100	143	166	1 828
Entertainment and recreation.	1 675	3 076	3 432	2 789	3 130	13 670
Miscellaneous	840	1 693	2 182	3 198	1 387	1 180
Total other building	38 827	44 706	62 397	55 768	37 231	41 375
Total all building	125 330	137 765	158 000	140 300	108 000	137 600

<sup>(</sup>a) From 1980-81, figures shown for the value of new houses, total new dwellings, alterations and additions and total all building have been rounded to the nearest \$100 000.

<sup>(</sup>b) Valued at \$10 000 and over.

Value of	Buildings	Completed:	Public	Ownership	by	Type,	Tasmania
	_		(\$'000)				

		(4 555)				
Type of building	1978-79	1979-80	1980-81	1981-82	1982-83	1983-84
New houses	12 268	10 902	13 720	9 746	8 051	12 543
Other new dwellings	5 464	7 847	8 843	7 483	8 704	6 923
Total new dwellings	17 732	18 749	22 564	17 229	16 756	19 466
Alterations and additions						
to dwellings (a)		113	_	42	23	30
Hotels, etc	1 028		123	_	_	48
Shops	_			10	67	16
Factories	305	217	62	889	1 690	240
Offices	5 389	12 047	6 080	6 501	14 144	4 369
Other business premises	1 980	7 681	7 798	3 014	3 234	208
Education	11 729	14 070	16 588	17 381	9 760	22 463
Religion	_	53	_			
Health	899	17 993	4 645	1 768	32 285	3 439
Entertainment and recreation .	2 465	2 960	1 762	1 934	1 763	2 793
Miscellaneous	7 570	5 985	16 659	2 353	2 402	22 068
Total other building	31 365	61 006	53 718	33 849	65 345	55 644
Total all building	49 097	79 868	76 282	51 120	82 125	75 139

<sup>(</sup>a) Valued at \$10 000 and over.

Value of all Building Completed: Total by Type, Tasmania (\$'000)

		(3000)				
Type of building	1978-79	1979-80	1980-81(a)	1981-82	1982-83	1983-84
New houses	80 718	87 189	88 700	74 300	60 000	91 800
Other new dwellings	18 742	19 264	22 875	19 109	18 966	15 536
Total new dwellings	99 460	106 452	111 600	93 500	79 000	107 300
Alterations and additions						
to dwellings (b)	4 776	5 469	6 700	8 400	8 500	8 400
Hotels, etc.	7 464	4 653	2 922	18 934	891	1 805
Shops	7 155	14 787	26 927	9 704	11 450	5 625
Factories	7 604	6 026	12 176	5 718	6 181	3 888
Offices	12 988	17 804	9 470	13 967	22 334	10 341
Other business premises	7 001	10 949	15 116	9 317	5 664	3 198
Education	13 244	15 099	18 649	18 815	13 952	26 792
Religion	910	680	1 075	981	972	394
Health	1 275	22 000	5 745	1 910	32 451	5 266
Entertainment and recreation.	4 140	6 036	5 194	4 722	4 893	16 463
Miscellaneous	8 410	7 678	18 841	5 552	3 790	23 248
Total other building	70 192	105 711	116 115	89 618	102 575	97 019
Total all building	174 427	217 633	234 400	191 400	190 100	212 800

<sup>(</sup>a) From 1980-81, figures shown for the value of new houses, total new dwellings, alterations and additions, and total all building have been rounded to the nearest \$100 000.

The following table gives details of the total value of all building commenced, completed and under construction for recent years. The items included under 'all building' are specified in the previous two tables.

<sup>(</sup>b) Valued at \$10 000 and over.

Value (When	Completed) of	All	Building,	Tasmania
	(\$m)			

Year	Com- menced	Com- pleted	Under construc- tion (a)	Year	Com- menced	Com- pleted	Under construc- tion (a)
1978-79	211.4	174.4	206.9	1981-82	181.6	191.4	154.5
1979-80	178.6	217.6	179.5	1982-83	159.5	190.1	120.7
1980-81	209.4	234.4	166.7	1983-84	202.0	212.8	110.1

<sup>(</sup>a) At end of period.

Value of Work Done and Changes in Construction Costs

The value of building work done represents the estimated value of the building work actually carried out during the periods shown.

As pointed out in the section 'Definitions' all values shown relating to building jobs are current values only; no attempt has been made to adjust values to a constant prices basis which would allow for increases in construction costs over the periods shown. The next table includes details of the relevant wholesale price indexes (for Hobart) and of average weekly earnings per employed male unit for Tasmania, which give some perspective to the trends shown in the building value series.

Value of Building Work Done, Tasmania, Wholesale Price Indexes and Average Weekly Earnings

	<u> </u>				-	
Particulars	1978-79	1979-80	1980-81	1981-82(f)	1982-83(f)	1983-84(f)
Value of work done—						
New houses\$'000	87 079	84 216	88 800	73 700	61 700	97 400
Other new dwellings\$'000	17 344	18 204	23 182	20 698	16 008	17 200
Total new dwellings \$'000	104 424	102 420	112 000	94 400	77 800	114 600
Alterations and additions						
to dwellings\$'000	5 404	5 451	8 100	9 000	7 200	9 600
Other building\$'000	90 989	109 510	118 491	85 771	80 399	80 600
Total building\$'000	200 816	217 382	238 500	189 100	165 300	204 800
Percentage increase (a)	+1.1	+8.2	+9.7	-20.7	-12.6	+23.9
Wholesale price index— Materials used in house building—			,			
Index number (b)	273.6	304.2	338.2	371.7	r 405.8	440.2
Percentage increase (a)	6.6	11.2	11.2	9.9	r 9.2	8.5
Materials used in building other than house building—						
Index number (c)	89.6	100.0	111.6	122.9	r 136.1	146.2
Percentage increase (a)	6.5	11.6	11.6	10.1	r 10.7	7.4
Average weekly earnings (d)—						
Amount\$	211.60	237.90	270.90	r 288.50	r 326.30	351.50
Expressed as index to base						
$1966-67 = 100.0 (e) \dots$	361.7	406.7	463.1	528.7	r 598.0	644.1
Percentage increase (a)	6.3	12.4	13.9	14.1	13.1	7.7

<sup>(</sup>a) Over previous year. (b) All groups, Hobart; base year 1966-67 = 100.0. (c) All groups, Hobart: base year 1979-80 = 100.0. Index numbers prior to 1979-80 are derived from an earlier index series with base year 1966-67 = 100.0. (d) Per employed male unit, Tasmania. Includes earnings of salaried employees, overtime earnings, over-award and bonus payments, etc., in addition to wages at award rates. (e) Average weekly earnings per employed male unit for Tasmania in 1966-67 were \$58.50. (f) Average weekly earnings of all male employees based on the new quarterly survey of average weekly earnings and not strictly comparable with the payroll tax based series. The index numbers and percentage changes shown are estimated by linking the two series at September quarter 1981.

# FINANCIAL ASSISTANCE FOR HOUSING

#### The State Housing Department

General

Capital funds for Government home construction in Tasmania are made available by way of allocations from the State Loan Fund, advances and grants under the Commonwealth-State Housing Agreement 1981.

The first Commonwealth-State Housing Agreement was entered into in November 1945. Under this agreement Tasmania received \$5 670 000 which it re-paid upon withdrawing from the scheme in August 1950. The State continued to build houses from its own resources until 1956 when it entered into a new agreement with the Commonwealth. This was renewed with minor modifications in 1961 and 1966. By 30 June 1971 Tasmania's aggregate advances under the scheme were \$89 477 000. In 1971-72 and 1972-73, funds for State housing were provided from the State Loan Fund. Under the Commonwealth-State Housing Agreement of 1973, however, the pre 1971-72 situation was effectively restored with the Commonwealth again, providing advances to the States for housing purposes. There were further Housing Agreements in 1978 and 1981. The enabling Commonwealth legislation for these are the *Housing Assistance Acts* 1978 and 1981.

Under the 1978 Agreement the Federal Minister, in consultation with the State Minister, decided the proportion of total money to be used for home purchase assistance and rental assistance. The *Housing Assistance Act* also covered special grants for aged persons and housing for other persons in need. Grants for Aboriginals were introduced in 1979-80.

Under the 1981 Agreement, interest payable to the Commonwealth on rental assistance loans was reduced from 5 per cent to 4.5 per cent. The Agreement provides that funds supplied to the States shall, in the year commencing 1990, be allocated to the States on a per capita basis. Allocations in the preceding years, commencing in 1981-82, shall progress towards that apportionment.

A scheme, jointly funded by both State and Commonwealth sources, to provide financial assistance to low income earners either renting or purchasing their home in the private sector, commenced during 1982-83. Assistance to private renters is administered by the Housing Department and to private mortgagors by the Tasmanian Development Authority. The allocation to the Housing Department for this purpose in 1984-85 is \$700 000.

Funds supplied to the Housing Department under the Commonwealth-State Housing Agreement, *Special Employment-related Programs Act* and the State Loan Fund, 1982-83 to 1984-85 were as follows:

Funds for State Government Housing (\$'000)

(\$ 000)			
Source	1982-83	1983-84	1984-85
Commonwealth-State Housing Agreement —			
Local Community Housing	••		200
Crisis Accommodation			359
Advances (Rental Housing Loans)	7 896	5 876	_
Rental Housing Grants	4 556	10 961	18 413
Pensioner Grants	1 009	866	904
Aboriginal Grants	518	696	696
Servicemen	19		_
Special Employment-related Program	1 185	1 659	_
Total Commonwealth Funding	15 183	20 058	20 572
State Loan Fund	12 865	13 000	18 250
Total	28 048	33 058	38 822

The Department obtains funds from various other sources including sales of rental dwellings and sales of surplus land.

#### Tasmanian Development Authority—Home Purchase Assistance

Since March 1984, the Tasmanian Development Authority has assumed the responsibility for the administration of funds made available for Home Purchase Assistance under the *Housing Assistance Act* 1981. The Housing Agreement operating from 1 July 1981 consolidated all past agreements. The State also provided State Loan Funds and semi-government loans for lending under the *Homes Act*.

Interest rates vary from six per cent to 13.5 per cent, and as with the term, are variable according to need. The Agreement has the following aims:

- (i) to facilitate home ownership for those able to afford it but not able to gain
  - it through the private market;
- (ii) to provide assistance for home ownership in the most efficient way and thus exclude from eligibility those not in need and minimise continued availability of assistance to those no longer in need. This is to involve provision of assistance that is related to particular recipients' current economic and social circumstances;
- (iii) to enable the States to exercise maximum autonomy and flexibility in the administrative arrangements necessary to achieve (i) and (ii), above.

The following table shows details for recent years:

Tasmanian Development Authority—Advances for Housing (a)

Particulars	1978-79	1979-80	1980-81	1981-82	1982-83	1983-84
Advances approved—						
Number	350	281	386	354	450	624
Value (\$'000)	7 532	6 551	10 128	9 448	12 665	18 030
Advances outstanding (b) (\$'000)	49 187	52 740	58 254	65 056	71 020	83 081

<sup>(</sup>a) Excludes advances to building societies.

The Tasmanian Development Authority also administers the allocation of advances to Co-operative Housing Societies; details of such advances and of the Co-operative Housing Societies appear in Chapter 18, 'Private Finance'.

#### **Defence Service Homes Corporation**

The Defence Service Homes Act 1918 assists certain former and serving members of the Defence Force to acquire a home on concessional terms.

The Defence Service Homes Corporation is, subject to the direction of the Minister for Veterans' Affairs, responsible for the administration of the Defence Service Homes Act.

Persons eligible for assistance under the Act include: members of the Australian forces and nursing services enlisted or appointed for, or employed on active service outside Australia or on a ship of war during the 1914-18 and 1939-45 wars; persons who served in the warlike operations in Korea or Malaya or who have served on 'special service' as defined in the Repatriation (Special Overseas Service) Act 1962; national servicemen who completed their service on or after 7 December 1972; members of the Defence Force who enlisted before 17 August 1977 and served on continuous full-time service, not being service that ended before 7 December 1972, and completed three years effective full-time service; and, members of the Defence Force who enlisted on or after 17 August 1977, and who complete six years effective full-time service and enter into a commitment to render further full-time service and who meet certain prescribed conditions. The categories of eligible persons also include the widows and, in some circumstances, the widowed mothers

<sup>(</sup>b) At end of period.

of eligible persons and persons domiciled in Australia and employed in certain sea-going service during the 1914-18 and 1939-45 wars.

The following loan conditions applied to 30 September 1984:

Maximum loan : \$25 000;

Interest rates : 3.75 per cent per annum on the first \$12,000, 7.25 per cent per annum

on any excess over \$12 000 up to \$15 000, and 10 per cent per annum

on any excess over \$15 000;

Maximum term : The maximum term permitted by the Act is 45 years or, in the case

of the widow or widowed mother of an eligible person, 50 years but

normally, the repayment period is limited to 32 years.

Operations under the Defence Service Homes Act

Since the inception of the Defence Service Homes Scheme in 1919, 9720 loans have been granted in Tasmania to persons eligible for assistance under the Act.

The following table gives details of the operations under the *Defence Service Homes Act* in recent years:

Defence Service Homes Corporation: Summary of Operations, Tasmania	Defence	Service	Homes	Corporation:	Summary	of O	perations,	Tasmania
--	---------	---------	-------	--------------	---------	------	------------	----------

		Number	of Loans Gr	_				
Year	Construc- tion of homes	Purchase of new homes	Purchase of previously occupied homes	Enlarge- ment of existing homes	Total	Capital Expendi- ture \$'000	Loan repay- ments \$'000	Number of loan accounts
1979-80	26	6	74	1	107	1 508	1 951	4 006
1980-81	41	3	86	1	131	2 396	1 833	3 910
1981-82	38	16	140	4	198	4 362	2 013	3 876
1982-83	43	4	134	4	185	4 001	2 891	3 818
1983-84	36	4	147	2	189	4 079	2 352	3 761

#### Home Savings Grant Scheme and Home Deposit Assistance Scheme

Legislative authority for payment of grants to eligible first home buyers commenced with the *Home Savings Grant Act* 1964. This Scheme provided for grants of up to \$750 to persons who acquired their first home on or after 2 December 1963 and no later than 31 December 1976.

On 1 January 1977, a replacement scheme, the *Home Savings Grant Act* 1976 commenced. This scheme provided for payment of grants of up to \$2 000 for homes acquired from the commencement date of the scheme, up to and including 2 June 1982.

The Home Deposit Assistance Scheme was announced on 18 March 1982 and ran in parallel with the *Home Savings Grant* (1964 and 1976) Acts, until termination of these schemes on 2 June 1982.

The Home Deposit Assistance Scheme provided for a grant of up to \$2 500 for first homes acquired between 18 March 1982 and commencement of the First Home Owners Scheme on 1 October 1983.

#### First Home Owners Scheme

The First Home Owners Scheme, established by the First Home Owners Act 1983, enables persons buying or building their first home on or after 1 October 1983, to qualify for a tax-free benefit. The objectives of the scheme are to help people achieve greater borrowing capacity, aid low income families who cannot bridge the deposit gap and thus have difficulty qualifying for a loan, and provide assistance with repayments during the difficult first five years of home ownership.

There is no restriction on the age or marital status of applicants. However, the benefit does not become payable until an applicant (or in the case of a joint application, at least one applicant) attains Australian citizenship or the right to permanent residence in Australia. The benefit cannot be paid if an applicant has already been paid a Home Savings Grant, or a Home Deposit Assistance Grant.

Benefits provided under the First Home Owners Scheme are income-tested. The income test applies to the taxable income of an applicant, or if more than one applicant, to their combined taxable income, for the last full financial year preceding home purchase.

Applicants who acquired their home prior to 22 August 1984 may receive a full benefit if their taxable income is \$24 300 or less. Where the income exceeds \$24 300 and is less than \$27 900, the amount of benefit is reduced proportionately. No benefit is payable if the income is \$27 900 or more.

For families, joint applicants and sole applicants, with dependent children, who acquired their home on or after 22 August 1984, a full benefit may be paid if the income is \$20 000 or less. Where income exceeds \$20 000 and is less than \$27 900 the amount of benefit is reduced proportionately. No benefit is payable if the income is \$27 900 or more.

For sole applicants without dependants, who acquired their home on or after 22 August 1984, the income limits are \$10 000 to \$13 950. A special income test may apply if income in the financial year of home acquisition is, or is likely to be, less than the previous year.

Successful applicants have a choice of three options for payment, as listed below:

Benefit options	No	One	Two or more
	dependants	dependant	dependants
Option 1— Subsidy only	\$5 000	\$6 500	\$7 000
Option 2— SubsidyLump Sum	\$3 000	\$4 500	\$4 500
	\$1 500	\$1 500	\$2 000
Option 3— SubsidyLump Sum	\$1 750	\$2 750	\$2 750
	\$2 500	\$3 000	\$3 500

NOTE: These figures are the maximum benefit paid where income is under the lower limit.

#### **Housing Loans Insurance Corporation**

The Housing Loans Insurance Corporation was established by the *Housing Loans Insurance Act* 1965 to administer the Commonwealth Government's Housing Loans Insurance Scheme under which approved lenders may be insured against losses arising from the making of housing loans. An amendment to the Act in 1977 broadened the scope of the Corporation's activities and, in addition to loans for the purchase or construction of homes for owner occupancy, loans for the purchase of vacant land and commercial housing propositions became insurable. The Act was further amended in 1983 to permit the Corporation to insure loans for the purchase, construction and improvement of commercial buildings and structures.

Owner occupancy loans are insurable without limit on loan amount, interest rate or term. Loans for the purchase of vacant land are insurable where the borrower intends to

erect his home at a later date. In the commercial field, loans for rental housing ranging from single houses or home units to multi-storey structures, together with loans for the purchase and development of land and the building of project housing including home units, are acceptable.

A once only premium is charged by the Corporation at the time a loan is made. With owner occupancy loans comprising 94 per cent and 95 per cent of the valuation of a home, the premium is 1.4 per cent of the amount of the loan. Loans from 95 per cent to 100 per cent of valuation carry a loading of 10 per cent on the 1.4 per cent rate. On loans of less than 94 per cent of valuation, the premium falls progressively to 0.1 per cent on loans for less than 76 per cent of valuation. Premium rates for the purchase of vacant land are as for home ownership and attractive rates apply to commercial loans.

The Corporation will insure a loan made to enable a borrower to buy or build a house, to buy a home unit, or to discharge an existing mortgage. Loans for alterations and extensions and loans to meet expenses of providing or improving lighting, sewerage, drainage, fences, roads, etc. are also insurable. In addition to loans secured by a registered first mortgage, there is provision for the insurance of second mortgage loans and cover is available for either full-term, fixed-term or five-year loans.

The following table shows the number of loans insured, their purpose and amount, during the past three years:

Hou	Loans Insured	ance Corporation, in Tasmania
	1981-82	1982-83

	1981	-82	1982-	83	1983-	84
Purpose of loan	Number	Amount (\$'000)	Number	Amount (\$'000)	Number	Amount (\$'000)
Housing—						
Building a new house						
Purchase of—	26	800	46	1 500	117	3 900
New house						
Established house	518	13 000	1 096	26 100	1 725	46 700
Discharge of mortgage	31	700	61	2 000	104	3 700
Home Units	16	400	27	700	55	1 400
Total	591	14 900	1 230	30 300	2 001	55 700

## **CONSTRUCTION INDUSTRY STATISTICS**

#### Commonwealth Department of Housing and Construction

The Department of Housing and Construction provides the Commonwealth Government with policy advice relating to housing and the building industry, monitors changes in these areas and administers the Commonwealth home purchase assistance programs.

The Department is also the Commonwealth Government's main construction agency and as such is involved in the forward planning, design, construction and maintenance of buildings and major engineering facilities for Commonwealth Departments and statutory authorities.

Its national works vary widely in scope and diversity extending from multi-million dollar airports and defence bases to small everyday repairs. In between is a wide range of projects which make a significant contribution to Australia's progress and meet essential needs such as health facilities, scientific laboratories, telephone exchanges and post offices.

#### **Further References**

ABS Publications produced by the Tasmanian Office

Building and Related Statistics, Tasmania (8780.6), annual.
Building Approvals, Tasmania (8731.6), monthly.
Building Activity, Tasmania (8752.6), quarterly.
Estimated Population of Local Government Areas in Tasmania (3201.6), annual.

Dwelling Unit Commencements reported by Approving Authorities, Tasmania (8741.6), monthly.

ABS Publications produced by the Canberra Office

Building Activity Australia (8752.0), quarterly.

Summary Characteristics of Persons and Dwellings, Tasmania (2204.0).

Private Sector Construction Establishments, Tasmania, 1978-79 (8720.0). Construction Activity in the Public Sector, Australia, 1978-79 (8712.0).

#### Other Publications

DEPARTMENT OF HOUSING AND CONSTRUCTION. Annual Report. (AGPS, Canberra.) DEFENCE SERVICE HOMES CORPORATION. Report. (AGPS, Canberra.)

DIRECTOR-GENERAL OF HOUSING AND CONSTRUCTION. Annual Report. (Government Printer, Hobart.)

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# Chapter 12

# **AGRICULTURE**

#### THE AGRICULTURAL INDUSTRY

#### General

The Tasmanian rural economy is marked by great diversity and, even allowing for the special regional adaptations made necessary by soil, climate, terrain and altitude, there are many agricultural establishments which individually exhibit a wide range of activities.

For many agricultural products, Tasmania produces considerably more than could be consumed locally and farmers must look outside the State for markets. One consequence of this is that the industry is affected significantly by international currency movements and changes to the degree of protection in overseas markets.

The pattern of farming in Tasmania has maintained an emphasis on rearing livestock for meat production with dairy products and wool also important. Apple growing, while still significant, has reduced its dependence on European markets with a greater proportion of the crop now sold interstate. The growing of vegetables for processing is a significant activity and oil poppies have become an important but fluctuating crop in the last few years.

#### Historical

The 1976 and earlier editions of the Year Book include a summary of agricultural statistics available from as early as 1818.

#### **Agricultural Industry Statistics**

#### Sources of Information

The statistics are principally compiled from census returns of livestock and crop production collected from establishments undertaking agricultural activity in Tasmania at 31 March each year. In conjunction with the general census, supplementary collections from farms are conducted where the harvesting of certain crops has not been completed by 31 March (e.g. apples, potatoes).

Additional information is also obtained from various marketing and other authorities and from a number of entirely separate collections covering such data as slaughtering and meat and dairy production.

#### Period Covered

Data relating to area sown, production and number of establishments growing crops are generally for the season ended 31 March. In cases where harvesting has not been completed by 31 March (e.g. potatoes), total production is nevertheless collected and included in published figures. Livestock numbers are also reported as at 31 March.

The census is conducted at 31 March (rather than 30 June) as it is considered to be the most appropriate date for all States to draw a line between the activities of two successive seasons.

The following tables give an indication of the seasonality of agricultural production in Tasmania. It should be noted that variations from the periods specified occur owing to variety of seed, district, seasonal conditions, scheduling of shearing and harvesting.

Times of	Planting and	Harvesting	Principal Crops	Tasmania

Crop	Time of planting	Harvesting period	Crop	Harvesting period
Cereals—			Fruit—	,
Barley			Apples	Feb. to May
Oats	Mar. to Oct.	Nov. to Mar.	Apricots	Jan. to Feb.
Wheat	May to Sept.	Jan. to Feb.	Peaches	Jan. to Feb.
Vegetables—			Pears	Feb. to April
Beans, French and			Plums	Jan. to Feb.
runner	Sept. to Jan.	Feb. to Apr.	Raspberries	Dec. to Jan.
Peas, green			Currants	Jan. to Feb.
Potatoes—			Gooseberries	Nov. to Dec.
Early	May to July	Oct. to Nov.	Strawberries	Nov. to Jan.
Late	Aug. to Nov.	Feb. to June		
Tomatoes	Oct. to Nov.	Feb. to April		
Other crops—		•		
Hops		Feb. to Mar.		
Field peas		Jan. to April		
Oil poppies				

#### Main Shearing, Lambing and Slaughtering Periods, Tasmania

Activity _	Period	
Shearing (a)	August to January	
Spring Autumn and winter	August to October March to July	
Slaughtering for export— Lambs (a)	November to March	

<sup>(</sup>a) The period shown is that in which the seasonal activity is more pronounced.

#### Agricultural Enterprise—Definition

An enterprise is defined as that unit comprising all operations in Australia of a single operating legal entity. See also 'Economic Censuses and Surveys' in Chapter 19 for a more detailed explanation of the concepts of *enterprise* and *establishment*.

The industry class of an agricultural enterprise is determined basically according to the predominant activity as measured after the application of unit values to commodity data.

#### Agricultural Establishment—Definition

Prior to 1975-76 an 'agricultural establishment' was defined as 'a piece of land, one hectare or more in extent, used for the production of crops or for the raising of livestock and the production of livestock products'. Establishments of less than one hectare, on which commercial agricultural pursuits were carried out (e.g. nurseries, poultry farms, etc.) were also generally included.

It was recognised that many small holdings included under this definition were not engaged in agriculture on a 'commercial' scale and that the contribution such 'sub-commercial' holdings made to item totals was, in most cases, negligible.

With the creation of a new register of agricultural businesses in 1974-75, the opportunity was taken to streamline the Agricultural Census by redefining the basic Census unit; an establishment undertaking agricultural activity has been included in the statistics if the enterprise operating the establishment had, or was expected to have, an estimated value of agricultural operations of \$1 500 or more during the current season. From 1981-82 the census unit was redefined to include establishments of enterprises with an estimated value of agricultural operations of \$2 500 or more.

The estimated value of operations for 1982-83 was obtained for each establishment by applying unit values to the commodity data reported on the 1981-82 Agricultural

Census returns. The unit values used were averages for the three years 1979-80 to 1981-82 to reduce the effects of short-term fluctuations in prices. In the case of crops, both area and production were valued, and for livestock, both animals sold during the year and numbers on farms at 31 March were valued. This was done to reduce the effects of variations in average yields and to give due acknowledgement to any business that undertook agricultural operations but did not actually sell any agricultural commodities during the year (due to factors such as crop failures or unfavourable market conditions).

The value of operations concept is merely a convenient way of objectively determining: the relative scales of activity of establishments undertaking agricultural activity so as to exclude the sub-commercial ones; and the industry classification of establishments. It is *not* a method of calculating *actual* gross income of farms.

The total effect of the new definition was not felt in 1975-76 as a resistance factor had been introduced to prevent rural establishments of 10 hectares or more being excluded from the tabulations, even if their value of agricultural operations were less than \$1 500. However, these establishments were excluded from the 1976-77 tabulations if their value of agricultural operations remained below \$1 500. The exclusion of these establishments accounted for most of the total decrease of approximately 2 000 (25 per cent) in the number of establishments in the 1976-77 tabulations from the previous year. A further revision for 1978-79, to recognise the activities of all beekeepers, involved the inclusion of beekeepers without rural land. These beekeepers were previously excluded from establishment counts, although their beekeeping activities were included.

An analysis undertaken to investigate the possible effect of the new definitions, and the consequent exclusion of a large number of 'sub-commercial' establishments, on census totals suggests that, except for a few minor crops, the effect on data is minimal.

#### Classification of Agricultural Establishments by Industry

The following table shows for 1982-83 all agricultural establishments in Tasmania with an estimated value of operations of \$2 500 or more, classified according to industry class and estimated value of operations:

Agricultural Establishments Classified According to Industry Class and Estimated Value	οf
Operations, Tasmania, 1982-83	
(Number)	

	Estimated value of operations (\$'000)							
Industry class	2 to 9	10 to 19	20 to 39	40 to 59	60 to 99	100 and over	Total	
Sheep-meat cattle	194	112	98	64	67	93	628	
Sheep	348	202	234	131	142	174	1 231	
Meat cattle	657	220	153	50	19	30	1 129	
Milk cattle	65	167	360	327	231	84	1 234	
Pigs	22	26	31	17	15	18	129	
Orchard and other fruit	70	48	65	46	61	58	348	
Vegetables—potatoes	12	20	47	66	72	54	271	
Vegetables—other	21	23	52	23	42	83	. 244	
Other	176	109	89	28	33	53 -	488	
Total	1 565	927	1 129	752	682	647	5 702	

# Number of Establishments with Crops or Livestock

At 31 March 1983 there were 5 870 establishments which satisfied the definition of an agricultural establishment (see earlier this Chapter). The following table shows the number of establishments growing selected principal crops or carrying livestock. This gives some indication of farming activities on a broad basis only, since the same establishment may be included more than once in the figures (in an extreme case, one establishment could be included 11 times).

Number of Establishments	Growing	Principal	Crops or	Carrying	Livestock.	Tasmania
--------------------------	---------	-----------	----------	----------	------------	----------

****			, ,	,		
Particulars	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83
Number of agricultural establishments						
(at 31 March)	6 141	(a)6 142	6 180	6 188	5 972	5 870
Establishments—						<del></del>
Growing—						
Grain (b)—						
Barley	385	398	352	325	395	382
Oats	151	280	221	253	298	239
Wheat	40	43	50	44	49	31
Hops	22	22	r 22	21	20	19
Vegetables (c)—	22	22	, ,,	21	20	19
Potatoes	636	599	r 545	r 557	556	575
Onions	r 55	r 58	73	78	92	96
Fruit (c)—			,,	70	12	70
Orchard tree	367	373	361	359	327	326
Small fruit	r 190	r 178	181	186	165	138
Carrying—			101	100	105	150
Cattle	5 428	5 186	5 056	5 063	4 885	4 638
Sheep	3 127	3 207	3 288	3 351	3 248	3 181
Pigs	851	775	690	569	454	403

<sup>(</sup>a) Not comparable with previous years, see definition of 'Agricultural establishment' given earlier.

# Land Utilisation on Agricultural Establishments

Establishments undertaking agricultural activity at present occupy 31.7 per cent of Tasmania's area of 6 830 000 hectares; details of land utilisation follow:

Land Utilisation on Agricultural Establishments, Tasmania (Hectares)

Type of usage	1979-80 r	1980-81 r	1981-82	1982-83
Crops (excluding sown pastures harvested) (a) .  Sown pastures (b)	78 206 911 029 1 239 919	83 934 921 277 1 215 125	89 674 910 214 1 168 585	98 478 903 024 1 166 951
Total area of all establishments	2 229 154	2 220 336	2 168 473	2 168 453

<sup>(</sup>a) Excludes area of sown pasture harvested; includes orchards and small fruits. Includes area double-cropped.

#### Definition of 'Crops'

'Crops' as specified in the previous table refers only to cultivated fields and orcharding land. Also, the total area of land sown or planted to crops is shown irrespective of whether the whole area was subsequently harvested or whether a portion or the whole of a crop failed and was not harvested. Where two successive crops are grown on the same land during the one season, the actual area of crops will exceed the area of land used for cropping. Further, it is reasonable to regard as a crop the yield obtained from harvesting sown pastures. The next table shows the total area of crops, using this wider definition:

Total Area of Crops, Tasmania (Hectares)

Area	1979-80	1980-81	1981-82	1982-83
Area used for crops (a)	r 78 206 61 087	r 83 934 66 211	89 674 66 088	98 478 53 197
Total area of crops	139 293	150 145	155 762	151 675

<sup>(</sup>a) As shown in previous table. Includes area double-cropped. (b) Includes lucerne.

<sup>(</sup>b) Ten hectares and over. (c) 0.5 hectares and over.

<sup>(</sup>b) Includes area harvested. Lucerne is classified to sown pastures.

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# Definition of 'Sown Pasture'

Sown pasture is pasture which has been developed by the sowing of non-indigenous grasses or legumes. The next table shows the total area of sown pasture and distinguishes between areas *cut* for various purposes and areas simply grazed:

Sown Pasture, Tasmania: Classification of Total Area (Hectares)

Particulars	1979-80	1980-81	1981-82	1982-83
Pasture harvested—				
Hay	57 689	61 555	60 939	48 588
Seed	1 436	1 730	1 792	1 022
Green feed or silage	1 962	2 926	3 357	3 587
Total pastures harvested	61 087	66 211	66 088	53 197
Pastures not harvested	r 849 942	r 855 066	844 126	849 827
Total sown pasture	r 911 029	r 921 277	910 214	903 024

#### **CROPS**

The summary table below shows the area devoted to principal crop types. The table shows that the area of pasture crops (harvested for hay, seed, green feed and silage) varies significantly from season to season.

Area of Principal Crops, Tasmania: Summary (Hectares)

(Fiec	tares)			
Стор	1979-80	1980-81	1981-82	1982-83
Section 1 (a)—				
Cereals for grain	20 122	21 356	23 772	21 850
Legumes	1 261	701	755	793
Crops for hay (b)	1 972	2 533	2 9 1 5	2 741
Crops for green feed or silage (c)	32 881	36 151	38 834	46 547
Fruit—Orchard tree	3 088	3 026	2 899	2 790
Berry and small	513	520	479	451
Vegetables for sale for human consumption .	13 901	14 458	16 126	16 158
Hops	620	672	811	889
Oil poppies	1 554	3 350	2 284	5 211
Other crops (d)	2 293	1 168	799	1 048
Total section 1 (e)	78 206	83 934	89 674	98 478
Section 2—				
Pasture harvested for hay, seed, green feed or silage (f)—				
Pasture hay	57 689	61 555	60 939	48 588
Pasture seed	1 436	1 730	1 792	1 022
Pasture harvested for green feed or silage.	1 962	2 926	3 357	3 587
Total section 2	61 087	66 211	66 088	53 197
Total area of crops	139 293	150 145	155 762	151 675

<sup>(</sup>a) Section 1 excludes pastures harvested for hay, seed, green feed or silage; details for these are given in Section 2.

<sup>(</sup>b) Excludes pasture hay; see Section 2 of table.

<sup>(</sup>c) Includes vegetables for stock feed but excludes pastures harvested for green feed or silage; see Section 2 of table.

<sup>(</sup>d) Includes grapes, lavender, vegetables for seed, nurseries, cut flowers, lupins and mint.

<sup>(</sup>e) Includes land double-cropped; in 1980-81 area involved was 731 hectares but is not available for subsequent years.

<sup>(</sup>f) Includes lucerne harvested.

Details of individual crops, their area, production and yield per hectare, are shown in the next table:

Crops: Area, Production and Yield per Hectare, Tasmania, 1982-83

		Prod	uction
Стор	Area (hectares)	Total	Yield per hectare
Cereals for grain—			
Barley	12 358	21 925	1.8
Oats	7 965	8 912	1.1
Triticale	599	545	0.9
Wheat	928	1 489	1.6
Legumes mainly for grain—			
Horse beans	44	45	1.0
Lupins	104	10	0.1
Field peas—			
Blue	330	520	1.6
Grey and other	315	348	1.1
Hay—			
Pasture (incl. lucerne)	48 588	157 117	3.2
Oaten	2 220	7 287	3.3
Other	521	1 502	2.9
Orchard tree fruit—			
Apples	n.a.	69 421	n.a.
Apricots	n.a.	235	n.a.
Pears	n.a.	1 479	n.a.
Berry and small fruit—			
Bearing— Currants (black and red)	246	761	3.1
Gooseberries		701	4.3
	2	71	4.4
Loganberries	16 91		4.4
Raspberries		380	
Strawberries	18	117	6.7
Non-bearing	78	• •	• •
Vegetables for human consumption—		0.246	7.3
Beans, French and runner	1 273	9 346	7.3
Peas, green (a)—	0.022	21.150	2.0
For processing	8 022	31 159	3.9
Sold in pod	12	30	2.5
Potatoes	4 749	173 147	36.5
Turnips, swede and white	185	2 224	12.1
Other	1 917	• •	• •
Pasture seed (incl. lucerne)	1 022	340	0.3
Other crops—			
Hops $(\hat{b})$	889	1 589	1.8
Oil poppies	5 211	n.p.	n.p.

<sup>(</sup>a) Ex-shell weight.

#### **Principal Crops**

Although data on area and production of crops are compiled, to give totals for each municipality, information in subsequent parts of this chapter dealing with geographical distribution is presented only in statistical divisions. The Hobart and Southern Division totals have been combined since the Hobart Division is predominantly urban in character. A description of the Tasmanian Statistical Divisions and Sub-divisions appears in Appendix A.

<sup>(</sup>b) Production is expressed as dry weight.

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### Summary of Principal Crops

The following tables, which summarise the area of selected principal crops and give details of production for recent years, illustrate the importance of potatoes, green peas, French and runner beans for processing, and the declining importance of orchards and small fruit. Oil poppies have become an important crop in recent years but details are not included as the figures relating to production are not available for publication.

Selected Principal Crops, Tasmania: Area and Production

Crop	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83
	Area (He	ctares)				
Barley for grain	11 444	11 938	10 558	10 056	12 108	12 358
Oats for grain	4 616	8 564	7 489	8 781	9 923	7 965
Wheat for grain	1 257	1 366	1 972	1 614	1 293	928
Total hay	48 601	68 035	59 661	64 088	63 846	51 312
Field peas	719	993	960	589	643	645
Pasture seed	922	1 958	1 436	1 730	1 792	1 022
Hops (a)	567	578	620	672	811	889
Beans, French and runner	1 143	1 405	1 207	1 263	1 521	1 273
Peas, green—		1 100	. 20.	1 200		1 2 . 5
For processing	6 221	6 476	6 997	7 097	7 973	8 022
Sold in pod	7	8	7	10	, , , 9	12
Potatoes	3 592	3 646	4 115	4 335	4 438	4 749
Orchard (tree) bearing (b)—	3 372	3 040	4113	4 335	7 730	7 /7/
Apples	2 601	2 693	2 661	n.a.	n.a.	n.a.
Pears	103	110	99	n.a.	n.a.	n.a.
Berry and small fruit, bearing—	103	110	,,	11.4.	11.4.	π.α.
Currants (black and red)	209	203	245	252	238	246
Loganberries	24	203	16	18	19	16
Raspberries	102	99	98	96	93	91
Strawberries	21	18	20	20	19	18
Strawocritics	21	10	20	20	17	10
	Production	(Tonnes)				
Barley for grain	19 403	26 971	17 304	18 307	23 267	21 925
Oats for grain	4 279	11 826	7 937	11 146	13 381	8 912
Wheat for grain	1 545	2 867	3 727	2 545	2 342	1 489
Total hay	172 348	304 847	249 766	249 348	242 593	165 906
Field peas	761	1 850	1 056	795	1 005	868
Pasture seed	172	722	442	575	675	340
Hops (c)	1 201	1 457	1 183	1 558	1 608	1 589
Beans, French and runner	8 296	13 464	6 618	10 319	9 688	9 346
Peas, green (d)—						
For processing	27 223	30 171	25 608	26 547	30 946	31 159
Sold in pod	r 15	r 18	r 16	r 24	22	30
Potatoes	107 240	124 385	136 197	155 965	160 797	173 147
Apples	63 444	85 230	74 434	76 033	67 376	69 421
Pears	1 913	2 643	2 339	2 095	1 871	1 479
Currants (black and red)	681	787	1 102	772	1 005	761
Loganberries	142	138	167	126	141	71
Raspberries	552	424	513	416	424	380
Strawberries	84	104	108	131	134	117

<sup>(</sup>a) Includes areas not in full bearing.

#### Cereals for Grain

Barley has become the most important cereal grain crop, the area sown having stabilised after a steady increase up to 1970-71. The area of oats for grain during 1982-83 decreased by 20 per cent from 1981-82, while the area of wheat for grain was 28 per cent down on the 1981-82 figure. Triticale, used mostly for feeding to poultry, continues to

<sup>(</sup>b) Area details by variety are not available for 1980-81, 1981-82 and 1982-83.

<sup>(</sup>c) Dry weight.

<sup>(</sup>d) Ex-shell weight.

be a significant cereal grain crop during 1982-83. The following table shows the Tamar Statistical Sub-division as the major grain growing district:

Area of Cereals for Grain by Statistical Division, 1982-83 (Hectares)

	11-64		Northern			!!	Total	
Cereals for grain	Hobart and Southern	Tamar (a)	North Eastern (a)	Total	North Western (a)	Western (a)	Total	Total Tasmania
Barley	2 455	5 972	1 406	7 378	2 525	_	2 525	12 358
Oats	2 418	3 706	1 605	5 311	235	_	235	7 965
Triticale	336	196	36	232	30	_	30	599
Wheat	427	346	43	388	112	**********	112	928
Other								_
Total	5 637	10 220	3 089	13 309	2 903		2 903	21 850

<sup>(</sup>a) Statistical sub-division.

## Legumes Mainly for Grain

The following table illustrates the geographical distribution of legumes mainly grown for grain and shows the Tamar Statistical Sub-division to be the major producing area:

Area of Legumes Mainly for Grain by Statistical Division, 1982-83 (Hectares)

	11 a b a a s		Northern			Mersey-Lyell			
Crop	Hobart and Southern	Tamar (a)	North Eastern (a)	Total	North Western (a)	Western (a)	Total	Total Tasmania	
Horse beans		38		38	- 6		6	44	
Lupins Field peas—	4	20	80	100	_	_	_	104	
Blue	22	283	_	283	25		25	330	
Grey, etc	53	161	50	211	51		51	315	

<sup>(</sup>a) Statistical sub-division.

#### Hay and Green Feed

The following table shows the geographical distribution of hay and green feed crops:

Area of all Hay and Crops for Green Feed or Silage by Statistical Division, 1982-83 (Hectares)

Сгор	11 - 1	Northern				1ersey-Lye	·ll	Total
	Hobart and Southern	Tamar (a)	North Eastern (a)	Total	North Western (a)	Western (a)	Total	Total Tasmania
Hay								
Pasture	5 285	13 548	6 367	19 916	23 383	4	23 387	48 588
Oaten	390	1 012	292	1 305	526		526	2 220
Other	93	129	92	221	206	_	206	521
Total	5 768	14 689	6 751	21 442	24 115	4	24 119	51 329
Crops for green								
feed or silage (b).	18 420	11 698	11 904	23 602	8 068	44	8 112	50 134

<sup>(</sup>a) Statistical sub-division.

<sup>(</sup>b) Includes vegetables for stock feed and pasture harvested for green feed or silage.

The North Western Sub-division, with the largest area devoted to sown pastures, produces 47 per cent of the State's hay. Its predominance in area under hay and green feed crops can be related to the fact that it carries 42 per cent of the State's cattle and is the principal dairying area. The main green feed crops are oats and turnips (approximately 66 per cent of the total green feed area); other green feed crops include rape, chou moellier, barley, millet and wheat.

### Orchard Tree Fruit and Berry and Small Fruit

Orcharding is heavily concentrated in and around the Huon Valley (Southern Statistical Division); the other main area is in the Tamar Valley (Northern Division). Berry and small fruit growing is almost entirely confined to the Derwent and Huon Valleys.

Area of Orchard Tree and Berry and Small Fruit by Statistical Division, at 31 March 1983 (Hectares)

Type	11-1	Northern			М	T-4-1		
	Hobart and Southern	Tamar (a)	North Eastern (a)	Total	North Western (a)	Western (a)	Total	Total Tasmania
Orchard tree fruit Berry and small fruit		381 43	9 14	391 57	260 25	_	260 25	2 790 513

<sup>(</sup>a) Statistical sub-division.

The following table shows the number and variety of fruit trees grown in Tasmania over recent years:

Fruit Trees, Tasmania ('000)

Variety	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83
Apples	1 200	1 206	1 210	1 212	1 174	1 164
Pears	46	47	45	42	38	34
Apricots	29	32	29	30	29	28
Peaches	2	3	2	2	2	
Nectarines	$\bar{2}$	2 ]	_	$\bar{2}$	$\bar{2}$	3
Cherries	<u>-</u> 6	$\tilde{6}$	(a) 13	7	8	6
Plums and prunes	2	2 \	(2)	2	2	2

<sup>(</sup>a) Separate details of the number of trees for cherries, nectarines and plums and prunes were not collected in 1980.

Despite a three per cent increase in apple production compared with the previous year, the gross value of the 1983 season apple crop represented only 24 per cent of the total gross value of all crops. The next table gives recent details of area, production and average yield:

Apples: Area and Production, Tasmania

		Ai	rea	Number	Number of trees		Production			
	Season						Yield			
		Bearing Non- Bearing bearing		Bearing	Non- bearing	Total	Per bearing hectare	Per bearing tree		
		hectares	hectares	'000	,000	tonnes	tonnes	kg		
1978		2 601	261	1 091	110	63 444	24.4	kg 58		
1979	***************************************	2 693	197	1 124	82	85 230	31.6	76		
1980		2 661	216	1 1 1 1 9	91	74 434	28.0	67		
1981		n.a.	n.a.	1 086	126	76 033	n.a.	70		
1982	***************************************	n.a.	n.a.	1 022	151	67 376	n.a.	66		
1983		n.a.	n.a.	953	211	69 421	n.a.	73		

Economic Problems: In recent years, instability in overseas markets and shipping costs have prompted the introduction of assistance to apple growers through schemes providing a stabilisation price for each variety of apple exported at risk to European markets. In the 1971 export season the Commonwealth Government's Apple and Pear Stabilisation Act came into effect. Under this Act a support price was decided upon for each variety and, depending on the average market return for that variety, payments either into or from the fund were calculated.

Since the 1974 season further subsidies have been provided under the Apple Industry (Assistance) Act. This Act, which effectively lifts the limit on payments under the stabilisation scheme, provides for equal contributions from the Commonwealth and State Governments.

With the introduction of a new underwriting scheme from the 1981 season, stabilisation payments for apples have been phased down and payments for pears terminated. The new scheme is wholly funded by the Commonwealth Government with the level of support calculated at 95 per cent of the weighted f.o.b. return per box of apples or pears to all markets in the immediately preceding four seasons.

As shown earlier in this chapter, the number of establishments with at least 0.5 hectares of orchard tree fruit (apples, pears, apricots, etc.) was only 326 at 31 March 1983. While this is substantially below the number of holdings with orchard trees 12 years ago (1 007 holdings at 31 March 1971), it had been stable at approximately 360 holdings since 1978, but showing a decline to 327 holdings in 1982.

A wide variety of apples is produced in Tasmania but many only in small quantities. Of the total production of 69 421 tonnes in 1983, two varieties accounted for 43 per cent (granny smith, 19 per cent and democrat, 23 per cent), golden delicious, jonathan, red delicious and sturmer pippin accounted for a further 44 per cent between them.

In the period from 1948-49 State production of berry and small fruit has dropped by 81 per cent. In spite of this, Tasmania is still the principal producer of raspberries and black currants in Australia.

Year	Currants (black and red)		Loganberries		Raspberries		Strawberries	
rear	Bearing area	Pro- duction	Bearing area	Pro- duction	Bearing area	Pro- duction	Bearing area	Pro- duction
	hectares	tonnes	hectares	tonnes	hectares	tonnes	hectares	tonnes
1948-49 (a)	812	2 735	86	380	844	3 449	101	395
1977-78	209	681	24	142	102	552	21	84
1978-79	203	787	24	138	99	424	18	104
1979-80	245	1 102	16	167	98	513	20	108
1980-81	252	772	18	126	96	416	20	131
1981-82	238	1 005	19	141	93	424	19	134
1982-83	246	761	16	71	91	380	18	117

Principal Small Fruits: Area and Production, Tasmania

#### Vegetables for Sale for Human Consumption

The concentration of vegetable growing in certain areas of the State is illustrated in the following table:

<sup>(</sup>a) Representative year from period when small fruit areas were at their highest level.

	Vegetables for Sale for Human Consumption	(a)							
Area	Under Selected Crops by Statistical Division,	1982-83							
(Hectares)									

	Hobart		Northern		М			
Crop	and Southern	Tamar (b)	North Eastern (b)	Total	North Western (b)	Western (b)	Total	Total Tasmania
Beans, French and runner		84	65	149	1 124		1 124	1 274
Peas, green	8	3 104	547	3 652	4 374	-	4 374	8 034
Potatoes	195	174	359	533	4 022		4 022	4 749
Onions	4	35	33	67	526		526	597
Other vegetables	193	258	31	289	1 022		1 022	1 504
Total	400	3 655	1 035	4 690	11 068		11 068	16 158

- (a) Includes vegetables for processing.
- (b) Statistical sub-division.

#### Hops

The almost universal use of the 'Pride of Ringwood' hop variety has led to a general increase in per hectare yields in recent years. As well, this variety has a higher percentage of usable resin than the older types and, at the same time, more efficient extraction methods have been devised. This has led to a changed disposal pattern with more emphasis on export, although export markets have not been particularly rewarding recently and stockpiling has occurred.

The majority of hops produced are seedless (through the exclusion of male plants) in order to meet changing brewery demand and the market for hop extract. Hops for shipment are dried, hammer-milled, compressed into pellets and put into airtight containers that are either vacuum sealed or nitrogen flushed before sealing. This reduces resin losses due to oxidation, allows storage without refrigeration and decreases the bulk to be shipped.

Tasmania's total production of 1 589 tonnes in 1982-83 was three quarters of the total Australian hop production of 2 100 tonnes. The next table shows details of area, production and gross value over a six-year period:

Hops, Tasmania: Area, Production and Gross Value

					Production	
	Season	Number of growers	Total area	Total (a)	Yield per hectare (a)	Value
			hectares	tonnes	kg	\$m
1977-78		22	565	1 201	2 126	2.4
1978-79	***************************************	22	578	1 457	2 521	3.2
1979-80		22	620	1 183	1 908	3.0
980-81	***************************************	21	672	1 558	2 318	4.7
981-82		20	811	1 608	1 983	5.1
982-83		19	889	1 589	1 787	6.9

<sup>(</sup>a) Dry weight.

#### Oil Poppies

Initially, oil poppies were grown on the mid North-West Coast; they more recently have been grown in other parts of the State, although adverse weather conditions, particularly excessive rain, have proved to be a problem in some areas.

In 1982-83, the total area of oil poppies was 5 211 hectares compared with 2 284 hectares in the previous year and 3 350 hectares in 1980-81, the distribution being: Hobart and Southern Statistical Divisions, 887 hectares; Northern, 2 134 hectares; and Mersey-Lyell, 2 190 hectares.

The sudden decrease in the area of oil poppies in 1979-80 was caused by the closure of the United States' market to the Tasmanian product. Subsequent negotiations reopened this market bringing a recovery to the industry.

Oil poppy growing provides the raw material in the production of codeine and, within Australia, is at present restricted to Tasmania where two processing plants now operate.

Production figures are not available for publication.

#### Pasture Seed

The geographical distribution (in hectares) of areas yielding pasture seed in 1982-83 was as follows: Hobart and Southern, 67; Northern, 816; Mersey-Lyell, 140; total, 1 022. The area of pasture seed fluctuates widely depending on farming conditions.

The main seed varieties produced on Tasmanian farms during previous years are listed in the following table:

		(kg)				
Variety of seed	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83
Clover-White	0.8	10.6	8.5	0.3	6.0	6.0
Other	1.1	0.9	7.3	0.1	0.4	1.3
Cocksfoot	12.3	42.3	13.7	44.6	43.3	34.5
Lucerne	0.9	4.2	2.0	4.1	1.5	1.0
Phalaris quatics	0.1	0.6	5.9	1.6	1.8	2.2
Ryegrass—Hybrid	5.4	17.9	32.1	19.6	15.6	7.6
Italian	91.7	283.9	72.0	84.5	102.2	78.8
Perennial	60.2	351.8	293.3	420.3	500.4	197.3
Other		9.6	6.8		3.2	11.3
Total	172.4	721.8	441.7	574.9	674.5	340.1

Pasture Seed Production By Variety, Tasmania

#### LIVESTOCK

#### Introduction

This subject is dealt with in two parts: the first deals with numbers of livestock on establishments undertaking agricultural activity; and a second part, 'Livestock Products'.

The first part needs no comment but the second part ('Livestock Products') requires explanation. In relation to the various types of livestock, the following products are included:

Cattle—meat, milk, butter, cheese. Sheep—meat, wool. Pigs—meat. Poultry—meat, eggs.

Butter, meat and cheese, although regarded as manufacturing industry products, are included in the later section 'Livestock Products', because the pattern and scale of livestock farming is closely linked to the processing of these products.

# Number of Livestock on Agricultural Establishments

The following summary table shows the number of livestock on agricultural establishments for recent years:

# Livestock on Agricultural Establishments, Tasmania, at 31 March ('000)

Year	Cattle	Sheep	Pigs
1978	733.3	3 969.3	64.2
979	656.9	4 156.6	60.8
1980	649.3	4 245.4	63.5
1981	658.5	4 380.9	54.5
982	628.4	4 513.1	47.2
983	562.1	4 450.9	50.6
	%	%	%
Tasmanian numbers as proportion of Australian total (1982-83)	2.5	3.3	2.0

#### Cattle

#### Classification

The traditional way of classifying cattle has been to call them either 'dairy' or 'beef' cattle but this has led to confusion since the terms may refer to either purpose or breed. In the period 1942-43 to 1962-63, the annual farm census required this dissection but the terms were not defined. From 1963-64 the cattle groupings have been organised to distinguish between: bulls classified by breed; 'house cows' specified separately; and all other cattle classified according to purpose (i.e. milk production or meat production). The results of the 1981-82 and 1982-83 farm censuses are given in the following table. This closely follows the lay-out of the collection form.

# Classification of Cattle on Agricultural Establishments at 31 March, Tasmania

V/		
Description	1982	1983
Milk Cattle		
Dairy breed bulls used or intended for service—		
Bulls 1 year and over	1.8	1.7
Bulls 1 year and over	0.7	0.8
Dairy cows and heifers—		
Cows, in milk and dry	99.8	98.4
Heifers, 1 year and over	23.6	22.5
Heifer calves, under 1 year	21.6	22.1
House cows and heifers (in milk and dry)	1.5	1.4
Total milk cattle	149.0	146.9
Meat cattle		
Beef breed bulls used or intended for service—		
Bulls 1 year and over	9.7	8.0
Bull calves under 1 year intended for service	2.7	2.6
Other cattle and calves (not included above) mainly for meat production—		
Cows and heifers, 1 year and over	233.2	200.7
Heifer calves, under 1 year	67.2	58.6
Other calves under 1 year	80.6	70.0
Other cattle, 1 year and over	85.9	75.3
Total meat cattle	479.4	415.3
Total cattle and calves for all purposes	628.4	562.2

The geographical distribution of establishments with cattle is shown below:

	Distribution	of	Cattle	in	Statistical	Divisions.	31	March	1983
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Statistical division or sub-division	Number of establish- ments with cattle	Total dairy cattle (a) ('000)	Total beef cattle (b) ('000)	Total cattle ('000)
Hobart and Southern	1 029	8.2	78.7	87.1
Tamar North Eastern	1 071 583	33.8 18.8	89.3 95.0	123.0 113.8
Total	1 654	52.6	184.3	236.8
Mersey-Lyell North Western Western	1 950	86.0	151.2 1.1	237.3
Total	1 955	86.0	152.2	238.4
Total Tasmania	4 638	146.9	415.3	562.2

<sup>(</sup>a) Includes dairy breed bulls and bull calves, cows and heifers used or intended for production of milk and cream for sale, and house cows.

The change in classification of cattle (outlined above) makes it impossible to compare, in full detail, the description of cattle in 1964-65 and subsequent years with descriptions reported in previous years but the following table is compiled to show broad groups regarded as generally comparable:

Description of Cattle on Agricultural Establishments at 31 March, Tasmania

	Year	Number of establish- ments with cattle	Bulls (1 year and over)	Cows and heifers (1 year and over)	Calves (under 1 year)	Other	Total cattle
			('000)	('000)	('000')	('000)	('000)
1950		9 759	6.2	158.4	60.6	49.5	274.7
1955		9 668	7.0	194.0	78.3	40.1	319.4
1960		9 031	7.2	229.2	100.8	38.1	375.3
1965		8 384	(a) 8.3	284.0	119.5	39.8	451.5
1970		8 405	10.8	378.8	200.6	56.2	646.4
1975		7 986	16.5	502.2	279.9	122.3	920.8
1980	) (b)	5 056	11.7	370.9	181.2	86.6	649.3
1983	3	4 638	9.7	323.0	154.1	75.3	562.2

<sup>(</sup>a) The specification of 'Bull calves (under 1 year)' from 1963-64 may affect the comparability of the series.

#### Breeds of Cattle

The main breeds of cattle in Tasmania for milk production are Jersey, Friesian and Ayrshire with small numbers of milking Shorthorn and Guernsey, while breeds used for the production of beef are Hereford, Aberdeen Angus, Shorthorn and Devon. In recent years, new cattle lines such as the Brahmans, Murray Greys and Charolais have been introduced by farmers wishing to utilise the advantages of cross-breeding.

<sup>(</sup>b) Includes beef breed bulls and bull calves, and other cattle and calves mainly for meat production.

<sup>(</sup>b) Not directly comparable with earlier years; see definition of 'Agricultural establishment', given earlier.

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## Sheep

The table below shows sheep numbers on agricultural establishments for recent years:

Sheep on Agricultural Establishments, at 31 March, Tasmania ('000)

Year	Sheep	Year	Sheep		Year	Sheep		Year	Sheep
1972	4 236.7	1975	4 136.2	1978		3 969.3	1981		4 380.9
1973	3 824.4	1976	4 248.9	1979		4 156.6	1982		4 513.1
1974	3 963.8	1977	4 014.6	1980		4 245.4	1983		4 450.9

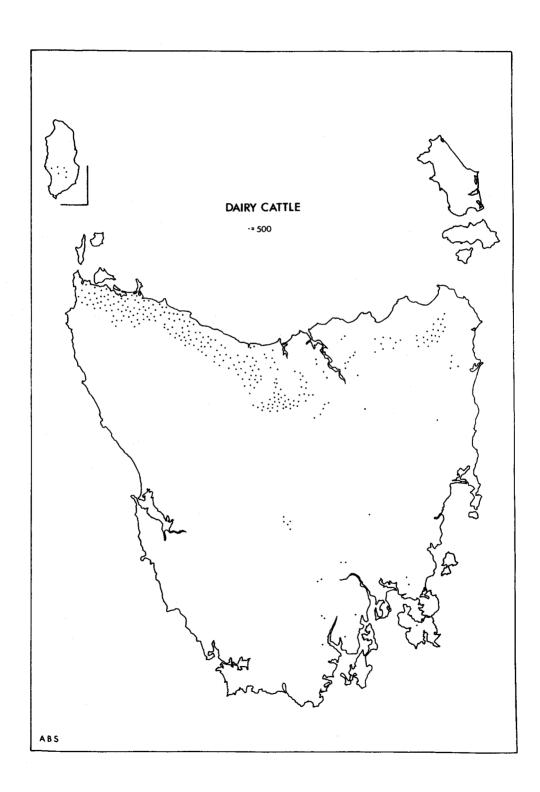
The next table shows the geographical distribution and various descriptions of sheep and also details of the lambing season:

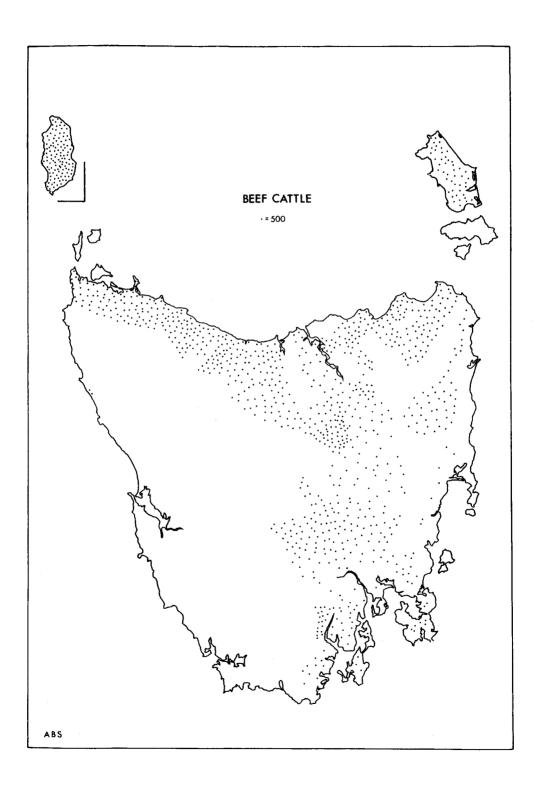
Description of Sheep at 31 March 1983 and Lambing 1982 Season, by Statistical Division

			Northeri	n	<i>M</i>	ersey-Lye	!!	
Particulars	Hobart and Southern	Tamar (a)	North Eastern (a)	Total	North Western (a)	Western (a)	Total	Total Tasmania
Establishments with sheepno.	974	967	432	1 399	807	1	808	3 181
Sheep ('000)—								
Rams (1 year and over)		15.0	12.7	27.7	5.6	_	5.6	53.5
Breeding ewes Other ewes (1 year	824.4	597.2	499.7	1 096.8	190.9	_	190.9	2 112.1
and over) Wethers (1 year and		39.4	36.5	76.0	7.4		7.4	150.2
over)		151.1	272.7	423.8	38.1		38.1	851.9
(under 1 year)	502.5	328.1	321.8	649.9	130.8		130.8	1 283.2
Total	1 803.9	1 130.8	1 143.4	2 274.2	372.8	_	372.8	4 450.9
Lambing, 1982 season— Ewes mated								
('000) Lambs marked	807.4	566.8	478.6	1 045.3	182.2		182.2	2 034.9
('000) Marking ratio (b)	744.4	513.8	416.7	930.4	177.7		177.7	1 852.6
%	92.2	90.6	87.1	89.0	97.5	_	97.5	91.0

<sup>(</sup>a) Statistical sub-division.

<sup>(</sup>b) Lambs marked as percentage of ewes mated; lamb mortality is one of the factors affecting marking ratios.





The following table summarises the descriptions of sheep and gives details of lambing on a State basis:

Description of Sheep at 31 March and Details of Lambing Summary, Tasmania

Particulars	1970	1975	1980	1981	1982	1983
Establishments with sheepno.	4 815	3 844	3 288	3 351	3 248	3 181
Sheep ('000)—						
Rams (1 year and over)	. 50	50	51	52	54	54
Breeding ewes	2 026	1 846	2 022	2 092	2 142	2 112
Other ewes (1 year and over)	195	209	127	137	138	150
Wethers (1 year and over) Lambs and hoggets (under 1	1 064	998	889	908	876	852
year)	1 225	1 034	1 156	1 191	1 303	1 283
Total	4 560	4 136	4 245	4 381	4 513	4 451
Lambing (a)—						
Ewes matedLambs marked—	1 831	1 644	1 861	1 892	2 010	2 035
Number'000	1 715	1 466	1 706	1 674	1 843	1 853
Marking ratio (b) %	93.6	89.2	91.7	88.5	91.7	91.0

<sup>(</sup>a) In the season preceding the year named.

## Breeds of Sheep

The Merino is the mainstay of the Australian wool industry and accounts for over 75 per cent of the Australian sheep population. However, in Tasmania the predominant sheep breeds are Polwarth and Corriedale; both were originally developed from merino cross-breds. A new sheep breed, the 'Cormo', has been developed in Tasmania to suit local conditions and to provide a highly fertile breed having a high yield of fine wool and good body conformation.

Over the past 10 years, the breeds of sheep reported by growers have shown a trend in favour of Polwarths. The following table shows the main breeds of sheep (including rams) as percentages of total sheep:

Proportion of Breeds of Sheep at 31 March, Tasmania (a)
(Per Cent)

Breed	1969	1970	1971	1974	1977	1980	1983
Polwarth	41.7	42.5	43.6	44.0	42.6	43.3	40.4
Corriedale	17.3	15.4	14.4	13.1	12.4	12.9	11.7
Merino	7.7	7.9	8.9	10.7	10.5	10.6	11.4
Cormo	_	0.5	1.0	1.9	3.0	2.9	3.2
Romney Marsh	1.9	1.2	1.3	0.7	1.1	1.3	1.4
Other breeds	3.3	3.5	3.9	4.4	5.4	7.0	8.2
Comebacks	11.1	12.6	11.8	14.8	13.9	9.1	11.0
Cross-breds	17.0	16.4	15.0	10.4	11.1	12.9	12.7
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0

<sup>(</sup>a) These data are now only available on a triennial basis.

Sheep in Tasmania are mostly run on improved pastures. However, particularly in the Midlands, use is made of considerable areas of unimproved 'run' country. The Central Plateau also provides summer grazing, particularly for wethers.

<sup>(</sup>b) Lambs marked as percentage of ewes mated.

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# **Pigs**

The geographical distribution of pigs, by statistical division, is shown in the next table:

	Hobart and Southern	Northern			Mersey-Lyell			
Particulars		Tamar (a)	North Eastern (a)	Total	North Western (a)	Western (a)	Total	Total Tasmania
Establishments with pigs (no.)	99	125	29	154	150		150	403
Pig numbers ('000)— Boars Breeding	0.1	0.2	0.1	0.2	0.3	_	0.3	0.6
sows and gilts		2.0 13.8	0.7 4.1	2.7 17.9	3.0 18.9	_	3.0 18.9	7.0 42.9
Total pigs	7.5	15.9	4.9	20.8	22.2	_	22.2	50.6

Distribution of Pigs by Statistical Division at 31 March 1983

The number of pigs at 31 March each year is not, in itself, a very meaningful figure. It is possible for a sow to produce two litters within the one year and for the offspring to number more than 10 in each litter. It follows, therefore, that the real measure of activity in pig-raising is not so much the size of the pig herd at a particular point in time, but rather the number of pigs slaughtered and the dressed carcass weight of the meat so produced; such information is given in the 'Livestock Products' section of this chapter.

In the previous table the most significant item is the number of breeding sows. A sow can be mated when only nine or ten months old and the gestation period is a mere four months. Piglets are weaned at four to six weeks—this early weaning calls for more skilled management but has advantages of avoiding heavy weight loss by the sow and reducing the period between litters.

The following table summarises pig numbers from 1960:

Year	Establishments with pigs	Boars	Breeding sows and gilts	Other (a)	Total pigs
1960	3 681	2 075	10 730	54 313	67 118
1965	3 315	2 327	14 578	75 116	92 021
1970	2 302	1 978	16 629	92 668	111 275
1975	1 010	976	9 243	53 754	63 973
1980	690 (b)	786	8 573	54 110	63 469
1983	403	637	6 993	42 937	50 567

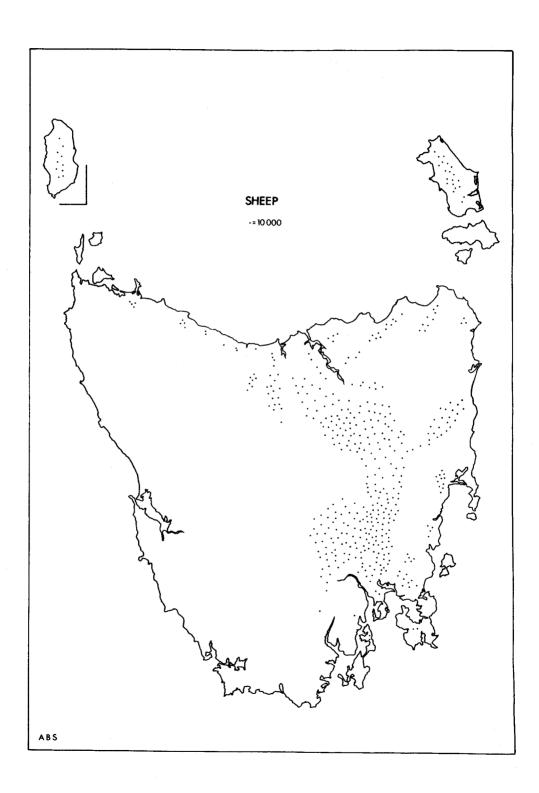
Pigs on Agricultural Establishments at 31 March, Tasmania: Summary

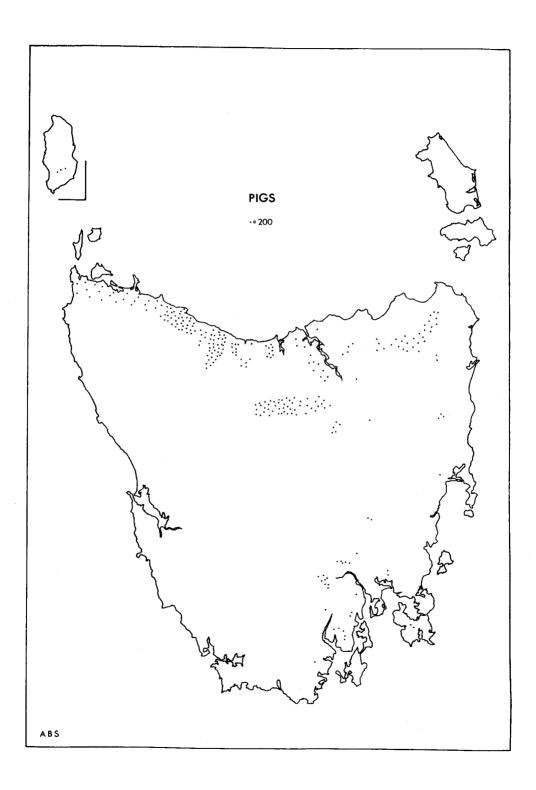
<sup>(</sup>a) Statistical sub-division.

<sup>(</sup>b) Includes baconers and porkers, backfatters, stores, weaners, suckers and slips.

<sup>(</sup>a) Includes baconers and porkers, backfatters, stores, weaners, suckers and slips.

<sup>(</sup>b) Not directly comparable with earlier years; see definition of 'Agricultural establishment', given earlier.





#### LIVESTOCK PRODUCTS

The statistics in the following section refer, in the main, to quantities of livestock products.

#### Wool

#### Wool Production

For statistical purposes, the total amount of wool produced in the State in any year consists of not only the 'clip' (shorn wool) but also of the wool on skins, irrespective of whether it is actually removed by local fellmongers or exported on skins. Production figures for recent years are given in the next table:

Wool Production (a) Summary ('000 kg)

Year		Shorn wool (including crutchings)	Fell- mongered wool, and wool exported on skins	Total	Year	Shorn wool (including crutchings)	Fell- mongered wool, and wool exported on skins	Total
1977-78		16 950	1 974	18 924	1980-81	18 091	1 958	20 049
1978-79		17 442	1 636	19 079	1981-82	19 847	1 936	21 783
1979-80		18 193	1 810	20 003	1982-83	19 804	1 875	21 680

<sup>(</sup>a) Fellmongered wool has been converted to greasy wool equivalent weight.

As illustrated in the previous table, the shorn wool component has accounted for over 90 per cent of total wool production over the last 6 years.

Total wool production of 21 861 000 kilograms in 1969-70 is the highest recorded wool output for Tasmania. During the early 1970s, uncertain economic conditions in the wool industry resulted in a substantial decline in production, but this has now recovered and wool production is steadily increasing.

# Export of Wool

Export details for wool for recent years are given in the following table:

Exports of Wool, Greasy (Overseas and Interstate) ('000 kg)

Year	Quantity	Year	Quantity	Year	Quantity
		1977-78			
1975-76 1976-77		1978-79 1979-80		1981-82 1982-83	15 698 15 293

It should be noted that not all Tasmanian wool is exported, some being used, after scouring, etc., for manufacturing purposes within the State. Any locally processed wool exported is excluded from the previous table.

#### Shorn Wool

The principal months for shearing in Tasmania are October, November and December, but during more recent years an increasing number of farmers have been shearing outside the traditional spring period. Such practices not only facilitate flock and property management, but also provide more continuous employment for shearers and shed hands. The following table gives shearing details for recent years:

Shearing	and	Shorn	Wool	Obtained
----------	-----	-------	------	----------

	Numbers shorn			Shor	n wool obt	Average yield			
Year	Sheep	Lambs	Total	From sheep (a)	From lambs	Total	From sheep (a)	From lambs	Total
	'000	,000	'000	'000 kg	'000 kg	'000 kg	kg	kg	kg
1977-78	3 483	759	4 242	15 947	1 003	16 950	4.58	1.32	4.00
1978-79	3 508	811	4 3 1 9	16 307	1 135	17 442	4.65	1.40	4.04
1979-80	3 668	882	4 550	16 978	1 215	18 193	4.63	1.38	4.00
1980-81	3 659	968	4 627	16 698	1 393	18 091	4.56	1.44	3.91
1981-82	3 767	1 074	4 841	18 318	1 529	19 847	4.86	1.42	4.10
1982-83	3 847	1 053	4 901	18 256	1 549	19 804	4.74	1.47	4.04

<sup>(</sup>a) Includes crutchings from sheep.

In 1982-83, 51 per cent of the shorn wool produced in Tasmania came from the Northern Statistical Division; the combined Hobart and Southern Statistical Divisions and the Mersey-Lyell Division, contributed 42 and 7 per cent of the total respectively.

The next table shows the geographical distribution of shorn wool production:

Shearing and Shorn Wool Obtained (a) by Statistical Division, 1982-83

	Hobart		Northern		М			
Particulars	and Southern	Tamar (b)	North Eastern (b)	Total	North Western (b)	Western (b)	Total	Total Tasmania
		Nur	nber Shor	n ('000)				
SheepLambs	1 659 362	915 292	1 014 287	1 929 578	259 113	_	259 113	3 847 1 053
		Shorn W	Vool Obtai	ned (tonr	ies)			
From—Sheep		4 253 437	4 981 424	9 234 860	1 151 180		1 151 180	18 256 1 549
Total	8 380	4 689	5 404	10 094	1 331		1 331	19 804
		Avei	rage Yield	(c) (kg)				
SheepLambs	4.74 1.41	4.65 1.50	4.91 1.48	4.79 1.49	4.44 1.59	<u></u>	4.44 1.59	4.75 1.47

<sup>(</sup>a) Includes crutchings from sheep.

<sup>(</sup>b) Statistical sub-division.

<sup>(</sup>c) Per sheep or lamb shorn.

#### Wool Auctions

The bulk of Tasmanian shorn wool is sold to overseas buyers through auctions organised by wool-selling brokers in Hobart and Launceston. Four auction sales are held in each centre every year—in October, December, February and June, with the February sale being the most important.

In addition to wool sold at auctions, some wool is bought direct from growers by dealers and by local manufacturers of woollen goods. A small proportion of the State's wool is marketed at Victorian auctions; growers on King Island and Flinders Island tend to use this outlet because of sea transport factors.

The following table shows the average price of shorn greasy wool sold at Tasmanian auctions in selected years since World War II and also the value of all wool produced. After a period of very low prices there was an upsurge in demand in 1972-73, particularly from Japanese buyers, and prices rose strongly. High prices continued until early 1974 when, with wool users turning to alternatives, buyers were being left with large stockpiles and prices started dropping. At this time the Australian Wool Corporation was established with the administration of the flexible reserve price scheme as part of its duties. A floor price of 300 cents per kilogram for 21 micron wool on a clean basis was originally set with the Wool Corporation carrying out 'support buying'. The market declined further, however, and the minimum price dropped to 250 cents for the 1974-75 and 1975-76 seasons. Prior to the devaluation of the Australian dollar in November 1976, the floor price was set at 275 cents for the 1976-77 season. After the devaluation the price was raised to 284 cents and remained at this level for 1977-78. Since then the following floor prices have been established: 1978-79, 298 cents, 1979-80, 318 cents; 1980-81, 365 cents; and 1981-82, 410 cents per kilogram. 1982-83 started at 422 cents but after the March devaluation, went to 454 cents per kilogram.

Tasmanian Average	Auction Pri	ce and Total Val	ue of Wool	Produced

	Year	Average auction price per kg of shorn greasy wool	Total value of wool produced (a)		Year	Average auction price per kg of shorn greasy wool	Total value of wool produced (a)
		cents	\$m			cents	\$m
1949-50		131	9.5	1978-79		234	42.0
1959-60		114	16.5	1979-80		270	50.9
1964-65		109	19.1	1980-81		277	50.8
1969-70		88	18.1	1981-82	***************************************	286	57.2
1974-75		137	23.9	1982-83		299	58.9

<sup>(</sup>a) Includes value of shorn wool, fellmongered and dead wool and estimated value of wool exported on skins.

The preceding price series refers only to shorn greasy wool sold at auction. In arriving at the value series for all wool produced, account is taken not only of wool sold at auction but also of direct growers' sales to dealers, manufacturers and fellmongers plus the estimated value of wool exported on skins.

## Classification of Greasy Wool Sold at Auction

The following information is compiled by the Wool Statistical Service of the Australian Wool Corporation on the basis of catalogues of auction sales. Wool sold at auction is classified according to quality which is expressed in terms of average fibre diameter. This is measured in millionths of a metre (microns).

Mean Micron Analysis (a) of	<b>Greasy Wool Sold at Auction</b>
(Source: Australian	Wool Corporation)

	Greasy wool sold at auction—percentage of total							
Average fibre diameter (mean microns)	In Tas	mania	In Australia					
	1981-82	1982-83	1981-82	1982-83				
Finer than 18	0.4	0.7	0.3	0.2				
18	1.6	1.7	1.5	1.2				
19	1.8	2.4	4.5	4.6				
20	2.5	3.2	10.7	11.3				
21	12.8	19.4	14.9	15.8				
22	17.9	17.8	19.6	20.2				
23	13.1	10.9	12.6	12.7				
24	12.5	9.4	10.4	10.0				
25	8.9	7.8	5.6	5.3				
26	4.7	4.1	3.8	3.5				
27	5.4	4.9	3.6	3.5				
28	3.7	4.0	2.7	2.8				
29	1.3	1.0	0.7	0.6				
30	4.8	4.4	3.6	3.7				
31	0.6	0.6	0.2	0.2				
32	2.6	2.8	1.6	1.7				
33	0.2	0.2	0.1	0.1				
34	0.8	0.6	0.3	0.3				
36	0.3	0.3	0.2	0.2				
38	0.1	0.1	0.1	0.1				
Coarser than 38		—	_					
Oddments	4.0	3.7	3.0	2.1				
Total	100.0	100.0	100.0	100.0				

(a) A micron equals one millionth of a metre; the measurement relates to fibre diameter.

While the proportion of fine wool is comparatively low in the Tasmanian clip (since the State is historically and climatically a producer of cross-bred wool), growers offering fine wool sell a high proportion of superfine merino wool at premium prices.

### Clean Wool Yield

In 1982-83 the Tasmanian proportion of auctioned greasy wool classified as 'finer than 25 mean microns' was 65 per cent, whereas the corresponding Australian proportion was 76 per cent. There is usually a difference of this order, but the Tasmanian average price is nevertheless usually a few cents above the Australian auction average. Tasmanian averages, with Australian equivalents in brackets, have been (in cents): 1976-77, 210.00 (182.73); 1977-78, 208.62 (187.14); 1978-79, 234.36 (205.24); 1979-80, 270.37 (243.57); 1980-81, 277.21 (255.97); 1981-82, 286.00 (265.00); 1982-83, 299.00 (270.00). This apparent contradiction is explained by taking into account a second factor (not included in the foregoing quality analysis) namely the yield of clean wool that can be obtained from greasy wool. In respect of this factor, Tasmanian wools tend to yield higher than Australian; both natural and artificial environmental factors operate to the advantage of the Tasmanian clip. Evidence of this peculiarity of Tasmanian wool is provided in the next table, which suggests that Tasmanian wool is freer from dust and vegetable matter than wool produced in other States.

Average Clean	Yield of Wool Clip, Tasmania and Other Australian Sta	ates
	(Source: Australian Wool Corporation)	

State of calc (a)	Yield of clean wool from greasy (per cent)							
State of sale (a)	1976-77	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83	
New South Wales	60.78	61.28	61.46	60.62	59.41	62.70	62.16	
Victoria	61.14	62.01	65.67	62.76	63.36	66.98	65.94	
Queensland	58.68	59.46	59.66	58.91	58.61	59.67	59.34	
Western Australia	57.50	56.91	57.68	58.35	58.14	60.60	60.59	
South Australia	56.70	56.88	57.87	58.87	59.28	61.81	61.02	
Tasmania	66.86	67.42	68.17	67.77	66.45	69.67	69.00	
Australia	59.21	59.93	63.39	63.45	60.56	62.98	62.32	

<sup>(</sup>a) Wool from other Australian States is not sold at Tasmanian auctions so, for Tasmania, 'State of sale' and 'State of origin' are virtually the same except that some wool from Tasmania (mainly King and Flinders Islands) is sold at Victorian auctions.

# Meat

## Slaughtering

To fully record the level of meat production for human consumption, statistics are obtained in respect of operations in abattoirs, other slaughtering establishments and factories, and slaughtering on farms.

The following table summarises slaughtering activity for recent years:

Stock Slaughtered (a) for Human Consumption, Tasmania ('000)

		Cattle and calves				Sheep and lambs		
Year	Bulls, bullocks & steers	Cows and heifers	Calves	Total	Sheep	Lambs	Total	Pigs
1977-78	. 161	133	69	362	387	650	1 037	92
1978-79	. 124	103	54	281	345	503	848	91
1979-80	. 96	83	39	218	317	613	930	89
1980-81	. 96	86	42	224	403	647	1 050	89
1981-82	. 107	91	54	252	452	691	1 143	77
1982-83	. 109	106	60	276	563	764	1 327	77

<sup>(</sup>a) In all registered slaughtering establishments and on farms.

### Meat Production

Statistics in terms of carcass weight covering the same field as the previous tables on slaughtering are shown in the following table. This provides a more precise measure of actual meat production and annual trends.

Production of Meat, Tasmania ('000 tonnes—Carcass Weight)

Year	Beef and veal		Mutton and lamb					
	Beef	Veal	Total	Mutton	Lamb	Total	Pigmeat (a)	Total meat
1977-78	59.8	1.6	61.3	7.0	9.8	16.9	4.8	83.0
1978-79	46.3	1.2	47.4	6.8	7.9	14.7	4.8	67.0
1979-80	36.6	0.8	37.4	5.6	9.0	14.7	4.9	56.9
1980-81	36.8	0.9	37.7	7.4	10.0	17.4	4.8	59.9
1981-82	40.6	1.3	41.8	8.5	10.6	19.1	4.3	65.2
1982-83	43.5	1.4	44.9	10.4	11.8	22.2	4.2	71.3

<sup>(</sup>a) Includes pork for manufacture into bacon and ham.

In the previous table on meat production, the product from pig slaughtering has been referred to as 'pigmeat'. A large proportion of 'pigmeat' is converted into bacon and ham in Tasmania. 'Pigmeat' is also exported and used, in part, for producing bacon and ham in other States. The next table summarises the production of bacon and ham in Tasmania since 1977-78:

# Production of Bacon and Ham, Tasmania (Tonnes—'bone-in')

Year	Bacon and ham	Year	Bacon and ham	
1977-78	2 505	1980-81	2 375	
1978-79	2 457	1981-82	2 634	
1979-80	2 094	1982-83	2 660	

# Export of Meat

The next table shows exports of edible meat from cattle, sheep and pigs by weight. Export weight cannot be directly compared with production weight since the former includes boneless meat and meat which has had its fat content reduced, while the latter is in terms of carcass weight.

Exports of Meat, Tasmania, 1982-83 (Tonnes)

Destination	Beef and	Lamb	Mutton	Pork	Offal (edible)	Bacon and
	veal					ham
Interstate	3 108	621	744	91	1	6
Overseas	16 473	2 222	5 813	2	1 144	
Total	19 581	2 843	6 557	93	1 145	6

The importance of Tasmania's overseas meat trade can be judged from Australian Meat Board estimates of the percentage of Tasmanian production actually exported. The trends in recent years are shown by the following table:

### Proportion of Tasmanian Meat Production Exported Overseas (a) (Source: Australian Meat and Livestock Corporation) (Per Cent)

Type of meat	1976-77	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83
Beef and veal	48.3	49.4	57.0	57.7	r 49.1	59.8	52.9
	74.1	71.4	69.1	56.1	r 79.8	76.5	66.3

<sup>(</sup>a) The estimated percentages are derived by converting actual export weights to a carcass weight equivalent, thus giving a basis for comparison with production figures.

### **Dairy Products**

The following table summarises milk production and utilisation over recent years:

# Milk Utilisation, Tasmania (a)

			Produ	ction
Year	Whole milk intake by factories	Market milk sold (b)	Butter (c)	Cheese
	million litres	million litres	tonnes	tonnes
1980-81 1981-82 1982-83	288 295 323	56 44 45	4 234 3 964 5 768	13 905 15 167 14 100

<sup>(</sup>a) Source: Australian Dairy Corporation. (b) Includes white, flavoured, and high and low fat milk included in factory intake. (c) Includes the butter equivalent of butter oil.

### Butter

Details of production and exports of butter for recent years are given in the following table:

Butter (a):	Production	and	Exports,	Tasmania
	(To	nnes	)	

	Year	Production (factory)	Net exports (b)	Year	Production (factory)	Net exports (b)
1977-78		7 910	6 248	1980-81	4 234	1 510
1978-79		7 075	2 530	1981-82	3 964	413
1979-80		r 5 490	2 871	1982-83	5 768	1 265

<sup>(</sup>a) Includes butter equivalent of butter oil.

## Bee-farming

The next table, which summarises beekeeping statistics for recent years, is restricted to details from apiarists with 40 or more hives:

Bee-farming, Tasmania

				Honey	produced	Beeswax produced	
	Year	Apiarists	Hives	Quantity	Average per productive hive	Quantity	Average per productive hive
		no.	'000	tonnes	kg	tonnes	kg
1977-78	***************************************	71	12.3	759	73.3	12.4	1.20
1978-79		63	12.1	684	67.3	12.3	1.21
1979-80		54	12.5	568	56.7	8.5	0.85
1980-81		59	12.3	669	64.6	9.1	0.88
1981-82		58	12.6	690	61.4	9.7	0.87
1982-83		60	12.9	1 793	73.2	12.5	1.07

Of the 60 apiarists with 40 or more hives in 1982-83, 22 with 100 or more hives contributed 93 per cent of the total honey produced.

Many of the larger commercial apiarists can be described as 'migratory' in the sense that they seasonally move their hives for access to leatherwood, growing in the Western Sub-division and near Lake Gordon. Leatherwood, *Eucryphia lucida*, from which a distinctively flavoured honey is produced, is unique to Tasmania. The quantity of leatherwood honey produced varies considerably from year to year depending upon the amount of blossom and weather conditions. Leatherwood honey production in 1982-83 (568 tonnes) accounted for 72 per cent of total honey production in 1982-83 compared with 48 per cent the previous year and 56 per cent in 1980-81.

Tasmania is both an exporter and importer of honey. The Tasmanian market shows a preference for the clover type of honey rather than the stronger flavoured leatherwood. Considerable quantities of honey are imported from other States, both for manufacturing and for retail outlets, while much of Tasmania's production, particularly leatherwood but also clover, is exported.

The following table gives details of Tasmanian production and exports of honey. Data on imports of honey are not available for publication.

<sup>(</sup>b) Net and gross are identical as there were no imports during the years shown. Includes overseas and interstate exports.

Production	and	<b>Exports of</b>	Honey,	Tasmania
		('000 kg)		

	Year	Production (a)	Exports		Year	Production (a)	Exports
1977-78		759	269	1980-81		669	343
			321	1981-82		690	440
1979-80		568	274	1982-83		793	398

<sup>(</sup>a) By apiarists with 40 or more hives.

### **Poultry Farming**

Household Production: Many householders have small flocks of up to 20 birds (i.e. below the legal minimum requiring registration and payment of fees). No accurate statistics are available for this component and it is excluded from the tables that follow.

Commercial Producers: Producers with small flocks over the legal minimum size (more than 20 birds) may nevertheless keep them mainly for their own use rather than for the sale of eggs. Accordingly, producers with less than 100 birds (of all types) have been excluded from these statistics; the Bureau's 1966-67 census of the poultry industry established that producers with between 20 and 100 birds numbered 213 but owned only three per cent of the total number of hens and laying pullets in commercial flocks in Tasmania.

In 1969 there were 148 poultry farms with a total of 181 000 hens and laying pullets; by 1980 the number of farms had decreased to 47 with 200 100 hens and laying pullets and 519 600 other poultry. A size classification of the 47 farms in 1980 shows that 22 farms (only 47 per cent of farm numbers) possessed 75 per cent of laying stock.

Poultry Numbers and Egg Production, 1979-80, Tasmania (a)
Commercial Producers Only (b)

		Poultry numbers at 30 June 1980					
Statistical division	Number of establishments with poultry	Hens and laying pullets (c)	laying Other pullets fowls		Eggs produced during year (d)		
	no.	,000	'000	'000	'000 doz.		
Hobart		62.8	29.7	_	1 062.2		
Southern		47.5	456.4	n.p.	773.4		
Northern	1.0	69.9	17.8	n.p.	1 224.0		
Mersey-Lyell		19.9	14.4	n.p.	353.0		
Total Tasmania	47	200.1	518.2	1.4	3 412.6		

<sup>(</sup>a) Data have not been collected since 1979-80.

### Poultry Slaughtering

The trend in poultry slaughtering in recent years has been towards larger scale establishments with the growing of birds for slaughter being carried out by farmers under contract to slaughterers. The following table shows the number of poultry slaughtered during the last three years and the weight of chicken and other poultry meat produced:

<sup>(</sup>b) Relates to establishments that possessed 100 or more birds of all types at 30 June 1980.

<sup>(</sup>c) Hen and pullet eggs only.

<sup>(</sup>d) Not comparable with Egg Marketing Board series due to different definitions.

Number and	Weight	of	<b>Poultry</b>	Slaughtered (a).	Tasmania
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Year			Live	weight	Dressea	weight (b)
		Number ('000)	Total (tonnes)	Average per bird (kg)	Total (tonnes)	Average per bird (kg)
			Chickens (c)			
1980-81 1981-82 1982-83		3 702 3 351 3 713	6 495 5 788 6 400	1.8 1.7 1.7	4 543 3 947 4 401	1.2 1.2 1.2
		(	Other Fowls (d	d)		
1980-81 1981-82 1982-83		107 82 115	254 208 275	2.4 2.5 2.4	127 114 186	1.2 1.4 1.6
		Ducks and L	Prakes, Turke	ys and Geese	··· ··· · · · · · · · · · · · · · · ·	
980-81 981-82 982-83		1 1 6	6 6 13	3.7 4.1 2.4	4 4 9	2.8 3.1 1.7

<sup>(</sup>a) Includes only establishments slaughtering 100 or more birds of all kinds. (b) Includes weight of whole birds, pieces and giblets. (c) Includes broilers, fryers and roasters. (d) Hens, roosters, etc.

# TECHNICAL ASPECTS OF AGRICULTURAL INDUSTRY

# Land Irrigation

### Introduction

In 1980-81 there were only 32 748 hectares of land irrigated in Tasmania. Owing to the generally reliable rainfall in the State, scarcity of water is not such a problem as it is in the other Australian States, although quite a number of streams are not permanently flowing and drought conditions in some areas of Tasmania do occur.

### Area Irrigated

A total of 1 582 farms reported the use of irrigation in 1980-81, an increase on the number during 1978-79 (1 270). Details of the area of crops and pastures irrigated in Tasmania in recent years are shown in the following table:

Area of Crops and Pasture Irrigated, Tasmania (a)
(Hectares)

Year		Cro					
	Fruit	Other Potatoes vegetables		Other crops	Pasture	Total	
1975-76 1976-77 1977-78 1978-79 1980-81	2 158 1 944 2 002 2 116 2 493	2 720 2 938 2 985 2 976 4 109	4 627 4 955 5 918 4 800 7 195	1 729 1 963 4 940 2 101 3 975	11 071 10 463 14 148 11 327 14 976	22 305 22 263 29 993 23 320 32 748	

<sup>(</sup>a) Details of irrigation were not collected 1979-80, 1981-82 and 1982-83.

# Irrigation Methods and Sources of Water

The main method of irrigation is by 'spray' which accounted for 71.5 per cent of the total area irrigated in 1980-81. The following table gives details of the areas of crops, etc. irrigated and the methods of irrigation used:

<sup>(</sup>b) Excludes pasture crops which are included with 'Pasture'.

		Method			
Crop or pasture irrigated	Spray	Furrow and/ or flood	Trickle	Multiple and other methods	Total
Crop—					
Fruit	1 620	102	553	200	2 475
Grape vines	10	_	8		18
Potatoes	3 744	23		342	4 109
Other vegetables	6 6 1 0	34	_	551	7 195
Other crops (a)	3 567	278	3	127	3t975
Pasture (incl. lucerne)	7 853	6 770	_	353	14 976
Total	23 404	7 207	564	1 573	32 748

# Methods of Irrigation, Tasmania, 1980-81 (Hectares)

(a) Excludes pastures harvested.

# Irrigation Schemes

Tasmania's irrigation schemes are described in Chapter 15, under the heading Rivers and Water Supply Commission.

## **Tasmanian Herd Improvement Organisation**

In accordance with the *Herd Improvement Act*, 1977, the Artificial Breeding Board was replaced by the Tasmanian Herd Improvement Organisation in July 1977. This new organisation took over the provision and promotion of herd improvement services, including both artificial breeding and herd recording.

### Artificial Breeding

In Tasmania most artificial breeding activities are undertaken by the Tasmanian Herd Improvement Organisation which operates a Semen Production Centre at Green Rises, near Cressy and seven artificial insemination centres throughout the State. Some artificial insemination services are provided by a private organisation. Approximately 78 per cent of inseminations in Tasmania are carried out with semen produced at Hadspen Park

Because artificial breeding allows extensive use of superior bulls, it has been used as an effective tool for herd improvement. From 1964 until 1977 the Artificial Breeding Board carried out dairy bull breeding programs in which genetically superior bulls were selected on the performance of their female progeny in test mated herds. These bulls have been used extensively as proven sires for large numbers of the State's dairy cows. It has been estimated that these programs have achieved a one per cent annual genetic gain in the State dairy herd.

Since July 1977, a young bull breeding program has been operating in Tasmania under the commercial name 'Gold Star Breeding Program'. This program involves the extensive use of semen from young bulls between 12-24 months of age and the subsequent selection of the top bulls utilized in these programs as 'Super Sires' for the breeding of future young bull teams. It is calculated that the new program has the potential to achieve annual genetic gain in the order of two per cent.

Owing to different management practices, artificial breeding has not been used so extensively in beef herds.

The following table gives details of the number of inseminations carried out by the Tasmanian Herd Improvement Organisation and the total number of cows mated by artificial breeding in Tasmania for recent years:

Artificial	Breeding:	Inseminations.	Tacmania
Arunciai	Dreeding:	msemmanous.	Lasmama

	Cows submitted for artificial insemination				
Year	Carried out by THIO	Total cows served (a)			
	no.	no.			
980-81	32 673	40 435			
1981-82	30 746	40 000			
982-83	31 190	40 000			
1983-84	33 745	42 000			

(a) Includes cows inseminated by all licensed operators (commercial organisations and owner-operators).

## Herd Recording

Since the establishment of the Herd Improvement Organisation in 1977, the centre at Hadspen has been the site for Tasmania's only centralised milk testing laboratory. Milk samples are collected from approximately half the dairy cows throughout Tasmania on a monthly basis. These samples are transferred to Hadspen where they are analysed for both milk fat and protein. Approximately half of these samples are further analysed for somatic cells as a means of identifying mastitis. Farmers involved with herd recording receive monthly reports on all of their cows and annually receive a full herd summary. This summary also generates breeding information on all bulls with daughters in the herd recording scheme. The Gold Star Herd Improvement Program relies on the annual herd recording results for the selection of elite cows for contract mating and to determine the breeding worth of the Gold Star bulls.

In the 1983-84 season a total of 46 952 cows in 518 herds were involved in the program.

Herd Recording: Lactations and Production, Tasmania (a)

		Total	No. of	Lactations (cows		A	verage p	roductio	n	
		completed lactations	herds	per herd) (average)	Milk	F	at	Pro	tein	Days
		ractations	ructuitons		(litres)	(kg)	(%)	$\overline{(kg)}$	(%)	Duys
1978-79		38 112	547	70	3 563	151	4.23	118	3.32	260
1979-80		41 993	546	77	3 393	145	4.26	113	3.33	259
1980-81		43 832	546	80	3 346	140	4.19	109	3.26	257
1981-82		41 656	519	80	3 490	147	4.20	106	3.04	264
1982-83		41 574	489	85	3 666	153	4.17	120	3.28	266
1983-84		44 327	508	87	3 852	160	4.15	135	3.50	274

(a) The results are based on cows completing lactations within the range of 120-300 days. The difference between these results and the total cows recorded, involves cows with lactations less than 120 or over 300 days.

#### **Artificial Fertilisers**

### Types of Artificial Fertiliser

The basic types of artificial fertiliser employed are phosphatic (e.g. superphosphate), nitrogenous (e.g. sulphate of ammonia) and potassic (e.g. muriate of potash); their essential chemical contribution to plant nutrition being phosphoric oxide  $(P_2O_5)$ , nitrogen (N) and potassium oxide  $(K_2O)$ . Superphosphate, either 'straight' or with additives, is most widely used in Tasmania, the additives consisting of trace elements such as cobalt, molybdenum, copper, boron, zinc, etc. In addition to the basic fertiliser types, many combinations are also used.

#### Usage

The quantity of artificial fertilisers used in recent years on Tasmanian farms has changed markedly. The removal of the government bounty on superphosphate in December 1974, a substantial increase in its price, and the need to reduce costs because of

low prices for many farm products all contributed to a sharp drop in usage. The reintroduction of the bounty in July 1977 has assisted recovery and resulted in increased usage of artificial fertiliser.

The following table shows the amount of all types of artificial fertiliser used for recent years:

Artificial	Fortilisars	I lead	Tasmania

Particulars	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83
Crops—						
Area fertilised ha	54 114	61 074	n.a.	n.a.	68 386	n.a.
Fertiliser used—Total t	26 686	29 093	29 607	30 638	31 899	35 838
Per hectare t	0.49	0.48	n.a.	n.a.	0.47	n.a.
Pastures (a)—						
Area fertilised ha	429 183	528 720	622 949	590 717	514 241	440 968
Fertiliser used—Total t	75 249	94 672	113 629	116 155	94 758	85 429
Per hectare t	0.18	0.18	0.18	0.20	0.18	0.19
Total usage—						
Area fertilised ha	483 297	589 794	n.a.	n.a.	582 627	n.a.
Fertiliser used t	101 935	123 765	143 236	146 793	126 657	121 267

<sup>(</sup>a) 'Pastures' includes lucerne.

### **ECONOMIC STATISTICS: AGRICULTURE**

Economic statistics have been produced on agriculture in recent years giving a series which, from 1974-75, is comparable with the economic statistics produced for the manufacturing, mining, retail and other sectors of the economy (see Chapter 19 'Economic Censuses and Surveys').

The population identified as the basic framework for the Agricultural Finance Survey consists of all agricultural enterprises, i.e. all enterprises classified to an industry within sub-division 01, Agriculture, of the Australian Standard Industrial Classification (ASIC). Data connected with any non-agricultural activity of an agricultural enterprise (such as agricultural services, retailing, transport, etc.) are collected in addition to data about its agricultural activities. Any enterprise which is predominantly engaged in non-agricultural activity is out of scope of the survey. Until 1977-78 the Agricultural Finance survey was conducted on an annual basis but from 1977-78 it has been conducted triennially. The main items of interest from the survey for the years 1975-76 to 1980-81 are contained in the following table. Further details and an explanation of the terms used (in addition to those in Chapter 19) can be found in the Canberra Office of the Bureau publication Agricultural Industries, Financial Statistics (Cat. No. 7507.0).

Financial Statistics, Agricultural Enterprises (a)
(\$ million)

(4			
1975-76	1976-77	1977-78	1980-81 (b)
30.2	35.1	39.2	49.1
36.3	43.8	57.6	97.3
57.3	57.7	65.1	81.4
130.0	144.1	169.9	238.2
65.2	67.8	82.4	135.0
66.6	77.9	87.2	115.1
60.2	69.2	77.4	100.3
38.6	52.0	59.2	71.3
26.3	41.7	49.7	44.9
15.5	18.2	19.4	31.3
115.9	100.8	101.8	171.8
	30.2 36.3 57.3 130.0 65.2 66.6 60.2 38.6 26.3 15.5	1975-76     1976-77       30.2     35.1       36.3     43.8       57.3     57.7       130.0     144.1       65.2     67.8       66.6     77.9       60.2     69.2       38.6     52.0       26.3     41.7       15.5     18.2	1975-76         1976-77         1977-78           30.2         35.1         39.2           36.3         43.8         57.6           57.3         57.7         65.1           130.0         144.1         169.9           65.2         67.8         82.4           66.6         77.9         87.2           60.2         69.2         77.4           38.6         52.0         59.2           26.3         41.7         49.7           15.5         18.2         19.4

<sup>(</sup>a) These figures are estimates based on a sample and are therefore subject to sampling errors. 'Standard errors' indicating the reliability of each item are included in the Canberra Office of the Bureau publication Agricultural Industries, Financial Statistics (Cat. No. 7507.0).

<sup>(</sup>b) From 1977-78 financial statistics of agricultural enterprises are compiled on a triennial basis.

### VALUE OF AGRICULTURAL COMMODITIES PRODUCED

### **Definitions**

The following definitions are employed:

- Gross Value is the value placed on recorded production at the wholesale prices realised in the market place. In cases where primary products are consumed at the place of production, or where they become raw material for a secondary industry, these points of consumption are presumed to be market places. Subsidies and bounties paid by the State, Commonwealth and Local Governments to primary industries are, in general, included in gross value of production.
- Marketing Costs are the costs of moving agricultural products from the place
  of production to the market place. These include freight, cost of containers, commission, insurance, storage, handling and other charges
  necessarily incurred by the producer in delivering commodities to
  market.
- Local Value is the value placed on recorded production at the place of production and is ascertained by deducting marketing costs from the gross value of commodities produced.

### **Sources of Information**

The data used concerning quantity of agricultural production are supplied principally by farmers. Price and cost data are obtained from statutory authorities (e.g. Australian Wheat Board), market reports, wholesalers, brokers, auctioneers, etc., and from overseas and interstate trade statistics.

### Period Covered

Crops: Production from crops grown during the year ended 31 March.

Other Agriculture: Year ended 30 June.

### Value of Agricultural Products

Agriculture, for value of production purposes, is divided into: crops; livestock slaughterings and other disposals; and livestock products.

# Crops

The following table shows gross values for the crops sector for recent years:

Crops: Gross Value, Tasmania (a)

1977-78	1978-79	1979-80	1980-81	1981-82	1982-83
2.9	5.0	3.6	4.9	6.4	6.1
0.2	0.4	0.2	0.2	0.3	0.3
0.2	0.3	0.2	0.4	0.5	0.5
13.5	17.6	17.5	17.7	19.9	26.7
1.2	1.4	1.8	1.4	1.6	1.0
n.a.			_	_	_
20.6	27.1	27.6	35.0	41.0	46.3
11.2	16.3	11.3	12.6	13.1	18.2
4.1	8.3	7.8	7.7	8.7	6.8
0.1	0.6	0.4	0.7	0.9	0.4
54.0	76.9	70.4	80.3	92.3	106.3
	2.9 0.2 0.2 13.5 1.2 n.a. 20.6 11.2 4.1	2.9 5.0 0.2 0.4 0.2 0.3 13.5 17.6 1.2 1.4 n.a. — 20.6 27.1 11.2 16.3 4.1 8.3 0.1 0.6	2.9 5.0 3.6 0.2 0.4 0.2 0.2 0.3 0.2 13.5 17.6 17.5 1.2 1.4 1.8 n.a. — — — — — — — — — — — — — — — — — —	2.9 5.0 3.6 4.9 0.2 0.4 0.2 0.2 0.2 0.3 0.2 0.4 13.5 17.6 17.5 17.7 1.2 1.4 1.8 1.4 n.a. — — — — — — — — — — — — — — — — — —	2.9     5.0     3.6     4.9     6.4       0.2     0.4     0.2     0.2     0.3       0.2     0.3     0.2     0.4     0.5       13.5     17.6     17.5     17.7     19.9       1.2     1.4     1.8     1.4     1.6       n.a.     —     —     —     —       20.6     27.1     27.6     35.0     41.0       11.2     16.3     11.3     12.6     13.1       4.1     8.3     7.8     7.7     8.7       0.1     0.6     0.4     0.7     0.9

<sup>(</sup>a) Excludes crops and pasture harvested for green feed or silage.

<sup>(</sup>b) Excludes harvested pasture.

The next table shows quantity and value details for the main items comprising the crops sector. Also included in the table is the average value per tonne of production.

Crops: Gross Value, Tasmania 1982-83

	Produc-	Gross value		
Crop	tion	Per tonne	Total	
	tonnes	\$	\$million	
Crops (excluding pasture harvested)— Cereals for grain—				
Barley	21 925	182.25	4.0	
Oats	6 912	216.04	1.9	
Triticale	545	160.12	0.1	
Wheat	1 489	139.01	0.2	
Total cereals for grain			(a) 6.1	
Legumes mainly for grain—				
Peas, field	868	316.61	0.3	
Total legumes mainly for grain	••	**	(a) 0.3	
Crops for hay (b)	8 824	58.2	0.5	
Fruit—				
Orchard tree fruit—	(0.10)	260.21	(1) 35 5	
Apples	69 421	369.21	(c) 25.6	
Pears	1 479	446.07	0.7	
Total orchard tree fruit			(a) 26.7	
Berry and small fruit—				
Currants	761	549.42	0.4	
Loganberries	71	842.79		
Raspberries	380	914.88	0.3	
Strawberries	117	2 031.27	0.2	
Total berry and small fruit			(a) 1.0	
Grapes	164	295.00		
Vegetables for sale for human consumption—				
Beans, French and runner	9 346	221.55	2.1	
Peas, green (ex-shell)	31 046	242.83	7.6	
Potatoes	173 147	118.90	20.6	
Total vegetables for human				
consumption			(a) 46.3	
Other crops—				
Hops (dry weight)	1 589	4 355.46	6.9	
Other`		••	11.3	
Total other crops	**	••	18.2	
Total (excluding crops from pasture)			98.7	
Pasture (including lucerne) harvested—				
Pasture harvested for—Hay	157 117	43.09	6.8	
Seed	340	1 305.00	0.4	
Total crops from pasture			7.2	
• •			106.3	
Total all crops	••	1+	100.3	

<sup>(</sup>a) Includes other crops not specified in the table. (b) Excludes pasture for hay. (c) Includes net payments to growers (i.e. payments to growers less con'ributions by growers) under Government price support schemes of \$0.7 million in 1982-83.

Average Unit Gross Values: In the next table, average unit gross values for the principal crops are shown for a six-year period. The unit values have been calculated for the principal agricultural products by dividing the total quantity produced into the total gross value of production for each crop. They therefore represent weighted average 'prices' of the product in all markets (including quantities retained for farm use) and indicate trends rather than prices actually paid to farmers.

Average Unit Gross Values: Principal Crops, Tasmania (\$ per tonne)

(a per tome)						
Стор	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83
Cereals for grain—						
Barley	121	122	124	150	162	182
Oats	121	118	118	163	168	216
Triticale			120	103	136	160
Wheat	96	100				
w licat	86	109	128	139	136	139
Legumes mainly for grain—						
Peas, field	204	197	210	241	298	317
			•			-
Crops for hay	27	31	38	48	52	58
Vegetables for sale for human consumption—						
Beans, French and runner	133	142	152	180	209	221
Peas, green (ex-shell)	158	158	159	177	223	243
Potatoes	83	102	104	110	116	119
Orchard tree fruit—						
Apples	202	195	223	220	281	369
Apricots	307	341	453	745	457	753
Pears	261	248	284	352	331	446
Grapes	n.a.	260	262	265	280	295
Berry and small fruit—						
Currants	700	722	780	801	666	549
Gooseberries	500	500	520	553	850	651
Loganberries	730	780	820	922	892	843
Raspberries	740	870	953	1 079	1 173	915
Strawberries	1 650	1 680	1 726	1 950	2 019	2 031
Hops	1 957	2 202	2 553	3 002	3 183	4 355
Pasture-						
Hay	25	28	32	32	37	43
Seed—rye grass	520	700	860	980	1 300	1280
		. 00	500	200		

# Livestock Slaughterings and other Disposals

For the main categories of livestock, the first of the next two tables shows the gross value of production (including an adjustment for net exports), and the second table the average prices paid to farmers for livestock sold for slaughter.

Livestock Slaughterings and Other Disposals (a): Gross Value, Tasmania (\$ million)

(* ************************************						
Particulars	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83
Cattle and calves	33.9	60.7	65.5	56.6	57.0	65.9
Sheep and lambs	11.7	20.5	21.4	23.5	19.7	18.8
Pigs	5.8	6.4	8.0	7.9	7.8	8.9
Poultry	3.4	4.2	4.9	5.9	5.6	7.0
Goats	n.a.	n.a.	0.6	0.2		
Total	54.8	91.7	100.3	94.1	90.2	100.7

<sup>(</sup>a) Includes an adjustment for net export of live animals.

Average	Livestock	Prices,	Tasmania	(a)
		<b>(\$)</b>		

Livestock	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83
Cattle (other than calves)	103.6	240.4	337.1	282.1	231.7	284.5
Sheep	7.7	14.5	12.1	13.1	8.7	6.6
Lambs	12.1	18.6	21.6	20.1	16.9	15.4
Pigs	62.4	69.7	90.3	89.3	101.5	115.6

(a) Estimated average prices, on the hoof, of livestock sold for slaughter.

### Livestock Products

A wide range of goods are manufactured in Tasmanian factories from livestock products. The two major products, milk and wool, in terms of gross value, accounted for 49 and 45 per cent of the total respectively, in 1982-83.

Details of gross values for livestock products for years 1977-78 to 1982-83 are shown below:

Livestock Products: Gross Value, Tasmania (\$ million)

(+						
Particulars	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83
Wool— Shorn (including crutchings) Fellmongered and exported on skins	34.6 2.3	39.9 2.1	47.7 3.2	49.2 1.5	55.9 1.3	57.7 1.2
Total	36.9	42.0	50.9	50.7	57.2	58.9
Dairy products, whole milk used for— Processing	26.1	32.3	30.1	34.6	42.6	52.2
purposes	8.7	7.9	8.3	9.2	10.6	12.2
Total dairy products	34.8	40.2	38.4	43.8	53.2	64.4
Eggs	3.8 0.7	3.8 0.6	3.8 0.6	4.9 0.7	6.6 0.7	7.1 1.2
Total livestock products	76.1	86.7	93.7	100.2	117.7	131.5

# Value of Agricultural Products: Summary

In the table that follows gross and local values of production for all agricultural commodities are shown for the last six years:

Agricultural Commodities Produced: Gross and Local Value, Tasmania (\$ million)

Particulars	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83
	Crops	s (a)				
Gross value of production	54.0 6.1	76.9 8.2	70.4 8.7	80.3 9.2	92.3 10.8	106.3 12.5
Local value of production	47.8	68.8	61.7	71.1	81.4	93.8
Livestock Sla	aughtering	s and othe	r Disposal	s		
Gross value of production	54.8 6.9	91.7 11.5	100.3 13.0	94.1 11.7	90.2 11.4	100.7 12.7
Local value of production	47.9	80.2	87.4	82.4	78.8	87.9

continued next page

# Agricultural Commodities Produced: Gross and Local Value, Tasmania (\$ million)—continued

Particulars	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83
	Livestock	Products				
Gross value of production	76.1 4.0	86.7 4.1	93.7 4.7	100.2 5.1	117.7 5.0	131.5 5.3
Local value of production	72.2	82.7	89.0	95.1	112.7	126.3
To	otal Agric	ulture (a)				
Gross value of production	184.8 17.0	255.4 23.8	264.4 26.4	274.6 26.0	300.2 27.3	338.5 30.5
Local value of production	167.9	231.6	238.0	248.6	272.9	308.0

<sup>(</sup>a) Excludes crops and pastures harvested for green feed and silage. No adjustment has been made to reduce totals in respect of intermediate production crops (e.g. stock feed) used on the holdings on which produced and not sold.

# Value of Agricultural Production: Constant Price Series

To produce a constant price series, a quantum index of the gross value of agricultural production is first calculated. A limited series was produced with bases; average 1974-75 and 1975-76 (combined) prices; and average 1981-82 prices. The constant price series shown in the next table demonstrates that, after taking account for inflation, there has been little movement in the gross value of agricultural production since 1972-73.

Gross Value of Agricultural Production, Tasmania

Year	At current prices Year (\$million)			
1972-73	145.7	145.7		
1973-74	164.7	144.9		
1974-75	137.6	144.3		
975-76	137.7	138.6		
976-77	173.9	146.1		
977-78	184.8	139.6		
978-79	255.4	150.6		
979-80	264.4	131.7		
980-81	274.6	132.1		
981-82	300.2	144.2		
982-83 p	338.5	147.5		

<sup>(</sup>a) Calculated using linked quantum index based on average 1974-75/1975-76 prices to 1979-80, and average 1981-82 prices from 1979-80.

# DEPARTMENT OF AGRICULTURE, TASMANIA

The functions of the Department of Agriculture are broadly three-fold: regulation, extension or advice, and research.

The regulatory function is the administration of laws relating to agricultural production and the protection of the health of livestock and crops. It includes the operation of port inspection and quarantine facilities and responsibility for the development of policy and continuing review of the Acts and Regulations.

In the performance of its extension function, the Department provides information and advice on all aspects of agricultural production, and encourages the adoption of proven agricultural practices to increase efficiency. Specialist officers in the Department report on aspects of Tasmanian agriculture to parliamentary or other commissions and inquiries.

Research is undertaken at research centres in Hobart, Launceston and Devonport and at five research stations in various parts of the State. This research provides the scientific basis for the extension and regulation functions.

The Department is administered by an operational Board of Management comprising the Director, who is the Head of the Department, and the heads of the five operational Services with responsibilities in the area of plants, animals, planning and co-ordination, resources and administration. The Head Office is in Hobart, and there are offices in each of fifteen districts covering the whole State, including the Bass Strait Islands.

Total expenditure by the Department of Agriculture from Consolidated Revenue in 1983-84 was \$14.2 million, compared with \$13.2 million in 1982-83.

### GOVERNMENT FINANCIAL ASSISTANCE TO RURAL PRODUCERS

### **Tasmanian Development Authority**

Since March 1984, the Tasmanian Development Authority has assumed the Government's lending functions to primary industry. The Authority, by its flexible lending policies, has a role to supplement existing sources of funds available from the commercial sector.

Particular emphasis is placed by the Authority on lending for proposals which may be developmental, involving the diversification of production or the adoption of innovative techniques.

Under the *Tasmanian Development Act* 1983, funds are provided for property purchase, refinancing of liabilities, land development, purchase of stock and plant, structural improvements, water storage, irrigation and for the fishing industry.

The Authority is a prime lender for the refinance facility provided by the Primary Industry Bank of Australia Limited. The assistance is to provide long-term lending to primary producers, thus augmenting existing forms of lending available from banks and other lenders.

Total approvals for the financial year 1983-84 to the rural and fishing industries amounted to 6.8 million, representing 157 loans.

# Young Farmer Establishment Finance Scheme

This Scheme is a program of financial assistance directed at assisting young rural based applicants with high personal attributes to progress towards their ultimate goal of full-time farming operators. Established in 1983, the Scheme has been developed as a complementary lending plan to the Closer Settlement Scheme.

Applications are received from young people already employed in occupations closely allied to farming, such as farm managers, sharefarmers, shearers, etc. for stock and equipment finance, stepping stone finance and deposit gap finance.

During the financial year 1983-84, 18 young farmers were assisted with loans totalling \$741 950.

### Closer Settlement Scheme

Under the provisions of the Closer Settlement Act 1957, the Tasmanian Development Authority is able to purchase viable farming properties for subsequent leasing to eligible young persons. The initial period of tenure, known as the development lease period, is on concessional rental terms to allow establishment before transfer to settlement lease on full commitments. The young settler is expected to have a farming background with acceptable managerial experience and have acquired equity such as cash, land, stock or plant of sufficient value to reduce commitments to a level which the applicant is able to meet when on settlement lease.

During the financial year 1983-84, seven properties were purchased for a total expenditure of \$1.25 million.

### War Service Land Settlement

In 1944-45, the Commonwealth and State Governments initiated a land settlement scheme for ex-servicemen. Large areas of land were inspected and subsequently over 180 000 hectares were purchased for development and allotment to ex-servicemen. All holdings have been allotted as grants in perpetuity at a pre-determined rental. After a period of six years the settler may, subject to conditions laid down in the *War Service Land Settlement Act* 1950, convert the property to a freehold title by payment of an option price. He may transfer his interest in the holding to a person not entitled to receive an allotment under the eligibility criteria of the scheme.

The role of the Authority in regard to these properties is now an administrative one, collecting rentals and repayments of advances and dealing with transfers of tenancies.

# Primary Producers' Relief Act

The Tasmanian Development Authority is the agency through which the Government channels special relief assistance, both loans and grants, to primary producers whose farm incomes have been affected as a result of natural disasters such as drought, fires, frost, hail and floods.

Since July 1979 the State, and particularly the south-east of the State, has been affected by a prolonged period of dry weather and, as a result, the Government invoked the provisions of the *Primary Producers Relief Act* and provided financial assistance to farmers in areas declared as drought affected.

Loans were available for carry-on assistance, restocking and resowing. During the financial year 1983-84, approvals for the three categories of assistance totalled \$983 000. Expenditure for the same period amounted to \$1 479 000.

Subsidy assistance was provided by the State for sheep slaughter, water cartage, agistment of cattle and sheep, and purchase of fodder for cattle, sheep and horses. The amount of assistance provided totalled \$253 854 in respect of 531 applicants.

In addition, a subsidy on fodder purchases was provided by the Commonwealth and this amounted to \$454 569, representing 689 applications.

# Rural Adjustment Scheme

As from 1 January 1977 a further agreement between the Commonwealth and State Governments provided for a Rural Adjustment Scheme. The agreement combined into one comprehensive scheme the various forms of rural adjustment which had previously existed, namely, the Rural Adjustment Act 1971, the Dairy Adjustment Program Act 1975 and the Beef Industry Assistance Act 1975.

Forms of assistance available under the scheme include debt reconstruction, farm build-up, farm improvement, carry-on assistance, rehabilitation assistance and household support. The general principle to be applied is to distribute available resources as widely as practicable but the overriding objective is to restore to economic viability those farms and farmers with the capacity to maintain viability once achieved.

In the financial year 1983-84, approvals amounted to \$403 000, involving eight proposals.

### **Apple Industry Assistance**

Following the report of the Industry Assistance Commission on Apples and Pears No. 239 of 28 March 1980, the Commonwealth and State Governments agreed to provide and fund a scheme on a dollar for dollar basis, whereby grants for price support would continue to be made in respect of apples grown in the State and exported at risk to the United Kingdom and Europe and to provide grant funds for the restructuring of the apple industry.

Funds are provided over a period of four years commencing from 1 July 1981 for supplementary assistance in the form of price support, or hard adjustment, and for approved research conducted by officers of the Department of Agriculture.

Up to 30 June 1984 approvals totalling \$1 026 785 have been allocated for orchard adjustment, with \$1 539 890 having been expended on price support.

### Further References

ABS Publications Produced by the Tasmanian Office

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# **CHAPTER 13**

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# Chapter 13

# FORESTRY, MINING AND FISHERIES

### **FORESTRY**

#### Introduction

When the first explorers ventured beyond the main coastal areas of mainland Australia, they encountered arid zones and desert nearly devoid of timber. By contrast, in Tasmania dense and continuous forest was the main barrier to early penetration, although the early settlements were sited in open savanna-like country which originated from firing by the Tasmanian aboriginals. No other Australian State has similar widespread conditions favourable for forest growth: a cool temperate climate; and an assured annual rainfall varying from 500 to 3 800 millimetres according to locality, and showing relatively small seasonal variation.

During the period since the first settlement in 1803, land clearing, timber exploitation and fires have left their mark; however the Forestry Commission estimates that the current total forest area (including some forest of little or no commercial value) is 2 779 000 hectares (i.e. about 40 per cent of the State's total area of 68 300 sq km).

#### Forest Area

Of all the Australian States, Tasmania is unique in its concentration of forest resources. Native forests of potentially commercial quality cover 2 214 000 hectares (or 32 per cent of the State's area). Of this area 905 000 hectares are privately owned and 1 309 000 hectares are Crown-owned commercial forests.

The need for permanent reservation of land for timber production was first officially recognised by the *Waste Lands Act* 1881 and the first forest reservation occurred in the late 1880s when some 21 270 hectares were gazetted. Reservations had reached 403 660 hectares by 1910 and 651 890 hectares at the time of World War II. The Commission has an on-going program of acquiring land suitable for dedication as State Forest. The gazetted area at 30 June 1984 was 1 554 735 hectares towards a target of 1 618 000 hectares of permanent State-owned forests managed for the benefit, both material and environmental, of future generations. Included in the area of State Forest is 319 280 hectares primarily set aside as protection and non-production forest.

The State forests are located, in the main, in five distinct regions: far north-west about the axis of the Arthur River; north-eastern highlands; north and north-west of the Great Lake; from the south coast, north to Lake King William; and the east coast area.

# Classification of State Forests and Timber Reserves

A classification of State forests, timber reserves and land acquired for forestry purposes is set out in the following table:

Classification of State 1	Forests and	l Timber	Reserves,	Tasmania	at 30	June 1984
	(*	000 Hect	ares)			

Forest type	Area
Eucalypt forest with a mature or potential mature height over 41 m	366
Eucalypt forest with a mature or potential mature height of 15m to 41m	659
Temperate rain forest (N. cunninghamii) and associated species	172
Plantations — Softwood (mainly pinus radiata)	36
- Hardwood	2
Total productive forest area	1 235
Non-productive forests and other land included for protection purposes	319
Total	1 555

### Timber Concession and Reserve Areas

The establishment in Tasmania of various industries using forest resources has given rise to the need for some guarantee of assured timber supplies to those industries. Therefore, certain concessions and cutting rights on Crown Lands have been awarded to companies relying on forest products as their raw materials. The map on the following page shows the location of concession and reserve areas in Tasmania. Cutting rights apply only to Crown Land and State Forest within the boundaries. Concession areas are those areas where a company is at present allowed to operate while reserve areas are set aside for future use. Providing that the company meets certain stipulated conditions, permission to remove timber from the reserve area will be granted by the Forestry Commission.

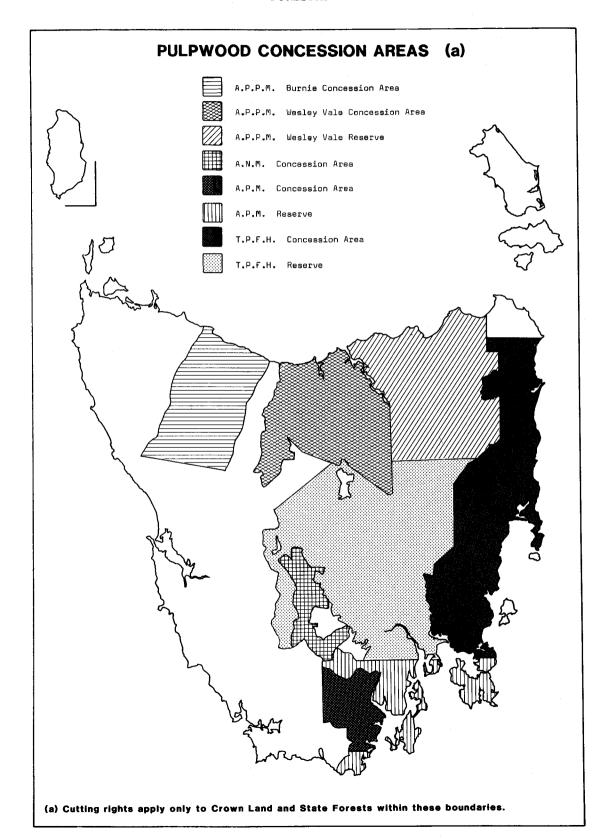
# **Plantations**

To fill an expected sawlog scarcity, 36 000 hectares of fast-grown softwood plantations had been established on State Forest up to 31 March 1984. In addition, these softwood plantations yield a long-fibred pulp which is a requirement of paper production. Softwood plantations cover less than 2.4 per cent of State Forest area and *Pinus radiata* is the principal species planted. An increasing area of native hardwood plantations has been established in recent years.

The following table shows the area of softwood and hardwood plantations established by the Forestry Commission on State Forest:

Area of Forestry Commission Plantations, Tasmania at 31 March (Hectares)

District		1983		1984			
	Softwood	Hardwood	Total	Softwood	Hardwood	Total	
Smithton	9		9	9	_	9	
Burnie	3 305	293	3 598	3 420	278	3 698	
Devonport	7 386	39	7 425	7 558	119	7 677	
Queenstown	1 675	6	1 681	1 675	20	1 695	
Launceston	1 158	172	1 330	1 255	174	1 429	
Deloraine	3	366	369	3	420	423	
Scottsdale	9 331	94	9 425	9 385	128	9 513	
Fingal	12 227	56	12 283	12 310	44	12 354	
Triabunna	_	91	91	_	91	91	
Geeveston	99	535	634	89	726	815	
New Norfolk	168	_	168	339		339	
Total	35 361	1 652	37 013	36 043	2 000	38 043	



## **Tasmanian Forest Types**

The productive, commercially harvested native forest estate consists of three main vegetation types: dry sclerophyll, wet sclerophyll and mixed forest (sclerophyll means hard leaved, i.e. eucalypt). Dry forest occurs predominantly on the east coast, wet sclerophyll in the north-west and north-east highlands. Mixed forest consisting of eucalypts with rainforest understorey species occurs where rainfall is above 1130 mm p.a. Rainforest is characterised by the dominance of myrtle (Nothofagus cunninghamii), sassafras (Atherosperma moschatum) and leatherwood (Eucryphia lucida). No timber harvesting operations occur in stands of pure rainforest. Blackwood (Acacia melanoxylon) grows where rainforest has been disturbed in the past, principally by fires. The main blackwood areas are in the north-west around Smithton.

Good quality eucalypt forests are uncommon on soils of reasonable depth and fertility where the annual rainfall is below 760 mm. Where the rainfall is above 1 130 mm, rain forest species appear in the understorey but are excluded should fires occur, say, every 40 to 50 years. With rainfall above 1 520 mm rain forests can exclude eucalypts. However, even with rainfall well above 1 520 mm, a combination of poor soils and frequent burning often produces areas of button grass and heathy plains.

Tasmanian forests are cut almost exclusively for hardwood (eucalypts), the slow growing native softwoods never having been very plentiful. The principal softwood species which have been utilised are Athrotaxis selaginoides (King Billy pine), Lagarostrobos (formerly Dacrydium), franklinii (Huon pine) and Phyllocladus aspleniifolius (Celery-Top pine).

Hardwoods: The most valuable eucalypts are those which belong to the so-called ash group—E. obliqua (stringy-bark), E. delegatensis (gum-top stringy-bark or alpine ash) and E. regnans (swamp gum or mountain ash). In the south and south-east E. globulus (Tasmanian blue gum) occurs in high quality forests. In areas where the annual rainfall is below 760 mm, the more important eucalypts are E. amygdalina (black peppermint), E. ovata (swamp or black gum), E. viminalis (white gum), E. obliqua (stringy-bark) and E. linearis (white peppermint).

Tasmania has 11 tree types suitable for pulpwood, of which 10 are eucalypts. The eleventh is myrtle (*Nothofagus cunninghamii*), a rainforest hardwood available in the north-west of the island. The eucalypts can be graded into:

First quality (four 'ashes')—

 E. obliqua (stringy-bark) (a) (b)
 E. delegatensis (gum-top stringy-bark) (a) (b)
 E. regnans (swamp gum) (b)
 E. sieberi (ironbark)
 E. viminalis (white gum) (a) (b)
 E. globulus (blue gum) (a)
 E. ovata (swamp or black gum) (b)
 E. amygdalina (black peppermint)
 (a) (b)
 E. linearis (white peppermint)
 E. tasmanica (silver peppermint)

Two species of eucalypt—E. delegatenisis and E. obliqua account for over 60 per cent of all eucalypt logs cut for woodchipping. The east coast offers all 10 varieties of which the five marked (a) are the common ones. The north coast offers, in useful quantity, only the six varieties marked (b).

Softwoods: Although Tasmania's native forests produce some very valuable softwood timber, these are very slow growing and in short supply. For this and other reasons, attention has been given to building up another section of the total forest estate—namely, plantations of exotic species, particularly *Pinus radiata*.

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### Forest Utilisation

### Introduction

An extensive sawmilling industry has been a major and traditional part of the Tasmanian scene since the mid 19th century. This was originally an industry solely reliant on native forests for its raw material, although now (and in the future) plantations of exotic softwoods play an important role in supplying the industry. For a number of years usage of logs for sawing, peeling and slicing remained at over 1 000 000 cubic metres per annum but usage has dropped since 1974-75 to a level of 647 000 cubic metres in 1982-83 and further in 1983-84, when 282 000 cubic metres of sawn, peeled and sliced timber was produced.

However, typical native forests produce much wood which is not suitable for saw-milling and in 1937 a start was made on the use of this previously wasted resource for the manufacture of paper at Burnie. Since that time, the use of pulpwood has expanded, particularly in the present decade, producing pulp paper, building panel-boards and raw woodchips. In 1941 the only newsprint mill in Australia was established at Boyer on the Derwent; in 1962, a pulp mill began operations at Port Huon in the south. A further pulp and paper mill commenced production during 1970 at Wesley Vale near Devonport. Further utilisation of forestry products has been introduced by factories producing plywood, hardboard, particle board and woodchips (for export).

Establishment of the woodchip industry and the expansion of other timber-using industries has resulted in greatly increased annual timber requirements necessitating careful utilisation of existing forest resources and the development of viable reafforestation schemes.

The problem of possible overtaxing of existing resources has been met partly by the implementation of fully integrated forest operations wherever possible. These operations ensure maximum use of the resource, with the best logs going to sawlogs and the remaining merchantable timber being processed as pulpwood. This also facilitates regeneration of the forest as most of the standing trees are removed, hence decreasing competition for available nutrients and light.

Pulpwood is also obtained from waste produced during sawmilling. During 1969-70, the year preceding the first export of woodchips, approximately 25 per cent of sawmill waste was chipped for re-use. As a direct consequence of the woodchip export trade the proportion rose to over 60 per cent in 1976-77 and had reached nearly 80 per cent in 1979-80.

Thinnings from Forestry Commission *Pinus radiata* plantations are used for sawlogs, treated fence posts, particle board manufacture at Wesley Vale and production of pulp for manufacture of paper at Burnie, Wesley Vale and Boyer.

Regeneration of harvested areas is carried out by the Forestry Commission and by the companies themselves. Every hectare of forest harvested on Crown land is regenerated, the work in some areas being done by the companies and in other areas by the Forestry Commission. Industries utilising privately owned forest resources have established incentive schemes to encourage reafforestation.

### Total Log Usage

The next table shows total log usage by the sawmilling, paper making, chipping and allied industries for recent years:

# Hardwood and Softwood Log Usage, Tasmania

( Oodin )								
Year	Sawmilling and plywood milling	Chipping, grind- ing and flaking	Total					
1978-79	863	2 941	3 803					
1979-80	942	3 594	4 536					
1980-81	992	3 370	4 362					
1981-82	863	3 071	3 933					
1982-83	647	3 182	3 829					
1983-84	768	3 467	4 235					

### **Timber Using Industries**

Normally the Bureau does not publish information relating to any single enterprise or establishment but only publishes statistical aggregates where these do not directly or indirectly reveal the operations of any single informant. However, a description of some of the State's major timber using companies is obviously desirable; therefore, the Forestry Commission has supplied the details given below:

# Paper and Particle Board

Associated Pulp and Paper Mills, a division of North Broken Hill Ltd, manufactures paper at Burnie and particle board and paper at Wesley Vale. The Company owns 128 000 hectares of forested land and holds cutting rights over Crown land for 24 kilometres on each side of the Emu Bay railway line from the north coast to the Pieman River.

In 1970 the Company completed the first stage of its pulp and paper mill at Wesley Vale at a cost of \$25 million. The first paper machine installed has an annual capacity of 41 000 tonnes of magazine paper and provision has been made for the installation of three additional machines. However, expansion at Wesley Vale has been deferred due to economic conditions and the difficulty of financing the very high capital cost of the project at the present. An alternative expansion project at the Burnie mill to produce bleached, softwood pulp from Company and Forestry Commission softwood plantations has been completed at a cost of \$25 million. In 1983 a \$35 million boiler project was completed. A coating machine also operates at Wesley Vale with clay mined from the company's clay mine at Tongannah.

### Newsprint

Australian Newsprint Mills Limited at Boyer is one of two mills producing newsprint in Australia. Boyer is 35 kilometres from Hobart on the Derwent River.

The Boyer mill's main timber supply is drawn from the Company's forest concession which is in the upper Derwent Valley, west of the Derwent River, and extending from the Snowy Range in the south, north to Lake King William. The Company is responsible for all forest management activities and maintains high environmental standards in the Concession.

The Florentine Valley Paper Industry Act, as amended, provides for a forest concession of 160 000 hectares, from which wood is harvested for use in the manufacture of newsprint and other products. Newsprint production from the three paper machines at Boyer was 221 000 tonnes in 1983-84. Continuing research and development at Boyer has led to new types of paper being produced including telephone directory paper; coloured, lightweight and high-brightness paper for special uses; and bulky paper for the publishing industry.

The Boyer mill and associated forestry activities employ over 1 500 people and transports products throughout Tasmania and the mainland. Wood harvested from the Concession is also used in sawmills, veneer mills and as chemical pulpwood. In 1978 machinery was installed to develop the manufacture of a special type of thermomechanical pulp from *Pinus radiata* which partly replaces costly imported Kraft chemical pulp. This pioneering project now draws pulpwood from Forestry Commission *Pinus radiata* plantations at Scottsdale and from the Company's own plantations near Boyer.

# Woodpulp

Australian Paper Manufacturers Ltd which manufactured woodpulp at Port Huon for shipment to the company's paper mills in other States, closed in October 1982. The State Government suspended their licence and is currently evaluating proposals from several companies for the future utilisation of the resource. This concession and reserve area includes virtually the whole of the D'Entrecasteaux Channel coastline and the south coast as far west as Prion Bay; inland it extends west to the Mt Picton area. Also included in the reserve are Bruny Island and the Tasman Peninsula.

FORESTRY 355

# Woodchips

Woodchips manufactured from sawmill waste and other timber previously of limited commercial value, are primarily used for woodpulp production. Forest Resources, Tasmanian Pulp and Forest Holdings Ltd and Associated Pulp and Paper Mills have woodchip export contracts with Japanese interests. Before granting woodchip export licences, the Commonwealth Government stipulated that the companies, if they did not already have the capacity, should develop woodpulp manufacturing facilities within 15 years, if economically feasible. A number of feasibility studies have been conducted but capital costs and markets have, to date, prevented the go ahead of a new pulping project. The export of woodchips from Tasmania commenced in 1971. Articles on each of the three companies' woodchip operations were included in the 1975 edition of the Year Book.

The plant of Tasmanian Pulp and Forest Holdings (a subsidiary of North Broken Hill Ltd) at Spring Bay, near Triabunna on the east coast, has an annual capacity of more than 813 000 tonnes of woodchips. Timber for the project comes from pulpwood concession areas extending along the Eastern Tiers over some 220 kilometres from Murdunna in the south to Eddystone Point in the north. The Company has also been granted concessions over reserve areas covering much of central Tasmania. These areas will ultimately be used provided Tasmanian Pulp and Forest Holdings Ltd meets various stipulations contained in the Pulpwood Products Industry (Eastern and Central Tasmania) Act 1968. In addition, the Company is permitted to obtain pulpwood from areas in the reserve set aside by the Forestry Commission for silvicultural purposes or by utilising trees removed to open the forest for economic extraction of milling-quality timber.

The Company's first woodchips were exported from the Spring Bay complex in April 1971. Over the last five years the production rate has been maintained at around 700 000 tonnes per year.

Associated Pulp and Paper Mills Ltd and Forest Resources constructed their woodchip plants at Long Reach, near Bell Bay, on the Tamar River. APPM draws its timber supplies from Crown forest concessions, private land and sawmill waste, while Forest Resources mainly relies on timber from private lands and sawmill waste. As well, Forest Resources currently removes pulpwood from areas of Crown forest in the north-west of the State. Annual capacity of the APPM plant is 1 065 000 tonnes of woodchips; Forest Resources 15-year export contract is for an annual 947 000 tonnes of woodchips.

Both companies commenced production of woodchips in 1972; APPM at its Long Reach plant in May 1972 and Forest Resources from its portable and satellite chipping plants in mid-1972. First exports by the two companies were made in late 1972. In February 1973 the first log trains commenced using the rail extension to Long Reach giving the two companies economic access to more distant timber supplies.

### The State Forestry Commission

The principal officers of the State Forestry Commission are the Chief Commissioner and three Commissioners. At 30 June 1984 the Commission employed a work force of 716 including administrative staff.

The Forestry Commission is primarily concerned with the conservation of Tasmania's State forests; this requires that it exercise control over the rate at which logs and pulpwood are taken, and also that it introduce effective measures to ensure regeneration. Other important functions include: road construction, providing access to State forests; maintaining an annual program of plantation establishment; protection of the forest estate from damage by fire, insects and disease; research, which aims to improve forest health and growth while developing more effective techniques of forest regeneration and fire protection; and the management of State forests for recreation and wildlife conservation.

# Private Forestry

The Forestry Commission's responsibility for State forests was widened by the Forestry Act 1977, which empowered the Commission to promote the development and

proper management of private forests. The Act provided for a Private Forestry Council to advise the Forestry Commission on private forestry and a Private Forestry Division to provide advice and assistance to forest owners and potential forest owners. Both these organisations were officially established in September 1978.

The activities of the Private Forestry Division have many facets, extending well beyond the administration of financial assistance schemes. It has to consider and recommend on the wide use of the private forest resource, which is of major importance to Tasmania's on-going industrial potential. An inventory review of the private forest resource and a survey of the loss of forest to agriculture are underway. Together, these will determine an acceptable rate of private forest cutting and the need for assistance in reafforestation.

Six assistance schemes have been established: The Pine Plantation Development Loan; the Nursery Stock Grant; the Native Forest Restoration Grant; the Eucalypt Plantation Grant; the Special Species Grant; and the Individual Research Grant. An amenity forestry assistance scheme was introduced in 1982 called Treescape. This scheme provides financial assistance for tree planting projects other than for commercial timber production on rural land.

The Division has an expanding role in educating and advising landowners on the management, protection and sale of timber from existing forests. A wide range of informational material has been produced. The response from landowners is such that the Private Forestry Division will be fully committed in implementing the provisions of the Act.

Activities of the Forestry Commission, Tasmania: Summary (Source: Forestry Commission)

<b>(</b>		,			
1978-79	1979-80	1980-81	1981-82	1982-83	1983-84
5 011	7 105	7 287	6.590	7 696	6 502
3 385	3 336	4 356	3 818	3 811	3 530
				• • • • • • • • • • • • • • • • • • • •	2 220
1 920	1 527	1 596	1 626	1 557	1 421
82	110	63	51	50	78
		0.5	٠.	50	,,
128	130	118	80	72.	112
. 9					10
	5 011 3 385 1 920 82 128	5 011 7 105 3 385 3 336 1 920 1 527 82 110 128 130	5 011 7 105 7 287 3 385 3 336 4 356 1 920 1 527 1 596 82 110 63 128 130 118	5 011     7 105     7 287     6 590       3 385     3 336     4 356     3 818       1 920     1 527     1 596     1 626       82     110     63     51       128     130     118     80	5 011     7 105     7 287     6 590     7 696       3 385     3 336     4 356     3 818     3 811       1 920     1 527     1 596     1 626     1 557       82     110     63     51     50       128     130     118     80     72

The Commission has a responsibility for controlling forest fires on or near State forests; losses through bush fires fought by the Commission in recent years are reported in the following table:

Bush Fires Fought by the Forestry Commission, Tasmania (Source: Forestry Commission)

	Finan		Area burnt					
Fires Year reported		State forest	Other Crown land	Private property (a)	Total (a)	Cost of sup- pression		
	no.	hectares	hectares	hectares	hectares	\$		
1978-79	90	2 602	1 333	419	4 354	63 608		
1979-80	183	21 100	3 403	12 302	36 805	414 163		
1980-81	141	5 597	15 694	1 588	22 879	580 118		
1981-82	163	17 956	58 337	28 827	105 120	605 531		
1982-83	255	34 979	15 326	12 080	62 385	1 243 645		
1983-84	113	12 653	2 919	4 711	20 283	1 030 017		

<sup>(</sup>a) Includes only those fires on private property fought to protect adjoining State forest or timbered Crown land.

Total expenditure by the Commission during 1983-84 was \$36.1m (\$31.5m in 1982-83). This expenditure was funded from Loan Funds, Consolidated Revenue, funds provided under the Softwoods Forestry Agreement Act 1976 and monies made available for unemployment relief. Money collected each year (mainly from timber royalties) is paid into Consolidated Revenue and, by law, becomes a grant to the Commission the following year.

The main revenue of the Forestry Commission is derived from royalties, i.e. charges paid by those taking timber from Crown lands. This revenue is specifically reserved for expenditure on forestry. The next table shows the revenue and expenditure of the Commission for the last five years; expenditure exceeds revenue since money from State Loan Funds devoted to forestry purposes is included in expenditure.

Forestry Commission Revenue, Tasmania (\$'000)

Particulars	1979-80	1980-81	1981-82	1982-83	1983-84					
Revenue										
Royalties	8 063 908 289	9 771 1 072 321	9 910 1 973 349	9 353 1 602 546	10 490 1 960 562					
Total	9 260	11 164	12 232	11 501	13 012					

The Commission is currently installing a new accounting system, and expenditure for 1983-84 is detailed in the following table:

Forestry Commission Expenditure, Tasmania, 1983-84

Particulars	Amount (\$)
Native Forest Estate	3 749 972
Hardwood Plantations Developing Account	1 364 219
Softwood Plantations Developing Account	7 439 056
Native Forest Operating Account	19 323 897
Softwood Plantation Operating Account	4 039 282
Repayment of State Loan	136 664
Repayment of Commonwealth Loan	130 130
Total	36 183 220

## Commonwealth Government-State Agreement

The Federal Softwoods Forestry Agreement Act 1967 was passed with the specific intention of increasing the rate of softwood-plantings in Australia by providing Federal financial assistance to the States. Under the Act each State was allocated: a base year area of softwood plantings which was financed by the State; and a scheduled area in excess of the base year figure, the excess financed by special Commonwealth Government loans. The base year area was constant for each year of the five-year program which commenced in 1966-67.

In late 1972 Federal legislation was passed which extended the Commonwealth Government-State softwood forestry agreement for a further five years. The legislation was made retrospective from July 1971. Financial terms were similar to those set out in the 1967 agreement. The Softwood Forestry Agreement Act 1976 extended the agreement, but with reduced planting rates, for an additional year from 1 July 1977. In 1978, the financial agreement was renewed for five years from 1 July 1977. The Commonwealth was to contribute to the tending of those plantations which had been established under the agreement during the 11-year period from 1966-67 to 1976-77.

### Sawmilling

The next table shows the number of sawmills and their geographical distribution in the State. There has been an overall reduction in recent years.

Distribution of Operative Sawmill and Plywood Mill Locations by Statistical Divisions and Sub-divisions

Statistical divisions and sub-divisions	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83
Hobart	12	11	11	10	9	8
Southern	48	43	50	49	41	37
Northern—						
Tamar	43	39	38	39	39	36
North Eastern	19	19	19	15	15	12
Total	62	58	57	54	54	48
Mersey-Lyell—						
North Western	36	34	41	37	38	33
Western	8	7	7	5	5	5
Total	44	41	48	42	43	38
Tasmania	166	153	166	155	147	131

### Average Size of Mills

In the year 1963-64 no Tasmanian sawmill exceeded an annual log input of 25 000 cubic metres. A size distribution of mills, classified by volume of log inputs, for recent years is given in the next table:

Number of Operative Sawmills (Including Plywood Mills) by Volume of Annual Log Input, Tasmania

G: 1 (C .)	Number of sawmills and plywood mills (a)							
Size classification (cubic metres)	1976-77	1977-78	1978-79	1979-80	1980-81	1981-82		
Up to 500	4	2	1	1		1		
501- 1 000	3	3	1	_	_	2		
1 001- 1 500	8	3	2	2	4	3		
1 501- 3 000	23	13	15	12	14	16		
3 001- 5 000	19	19	22	17	19	15		
5 001-10 000	38	22	18	21	23	21		
0 001-15 000	7	8	8	6	4	7		
15 001-30 000	9	11	13	11	9	8		
30 001-45 000	4	2	2	2	5	4		
15 001-60 000	1	2		$\overline{2}$	1	1		
Over 60 000	1		1	2	3	2		
Total	117	85	83	76	82	80		

<sup>(</sup>a) Includes only mills employing four persons or more; data has been extracted from manufacturing census results.

### Mill Production of Timber

As shown previously, logs treated in sawmills and plywood mills during 1983-84 for the production of sawn, peeled, and sliced timber totalled 768 000 m³ while the resulting timber produced totalled only 282 000 m³. The difference between the volume of logs treated and of timber produced is not all waste from the millers' point of view. Admittedly, there is very limited use for sawdust but most offcuts are sold as input to the woodchip and woodpulp industries or docked and sold as firewood.

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# Chipping, Grinding and Flaking of Wood

Chipping, grinding and flaking of wood is the first process in the production of wood pulp, paper, etc. Up to 1969-70 all chipped, ground and flaked wood was used in local plants making wood pulp, paper, hardboard and particle board. However, from 1970-71 production of woodchips for overseas exports has also been undertaken.

The importance of woodchipping for export is indicated by the following table:

Particulars	1978-79	1979-80	1980-81	1981-82	1982-83	1983-84
Producing locations at 30 June no.	32	32	30	32	31	30
Materials used— Logs (a)'000 m³ Sawmill offcuts'000 m³	2 941 264	3 594 292	3 370 309	3 071 246	3 182 212	3 467 251
Total'000 m <sup>3</sup>	3 204	3 885	3 679	3 317	3 394	3 719
Chipped, ground and flaked wood produced (green weight)— For local processing'000 t For export'000 t	781	871 2 802	1 074 2 354	938 2 181	875 2 293	873 2 635
Total'000 t	2 978	3 672	3 428	3 119	3 168	3 508

Chipping, Grinding and Flaking of Wood, Tasmania

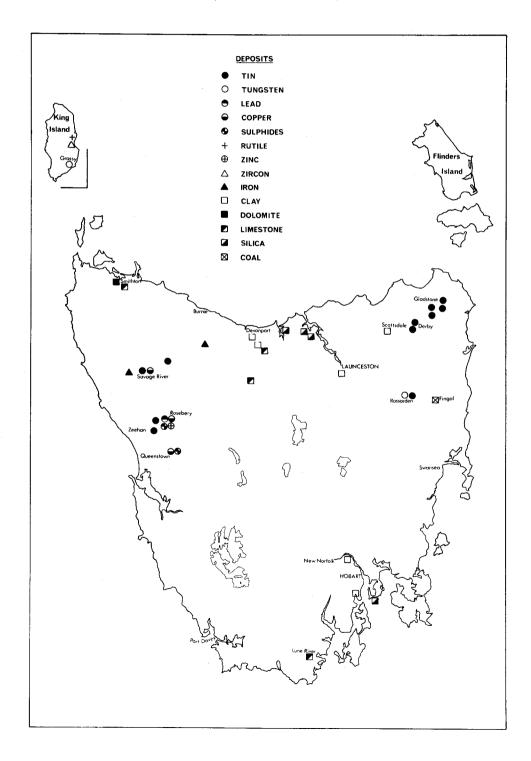
### MINING

For statistical purposes, mining is taken to cover the operations normally thought of as mining and quarrying (i.e. the removal from underground or surface workings of ores, etc.), the recovery of minerals from ore dumps, tailings, etc. and ore dressing (i.e. concentration and other elementary treatment). It does not include the smelting and/or refining of metallic minerals or the processing of non-metallic minerals (e.g. limestone into cement); these operations are classified as manufacturing.

In the present Tasmanian economy, two important metals will serve to illustrate the distinction between mining and manufacturing: aluminium, produced at Bell Bay on the Tamar; and zinc produced at Risdon near Hobart. In terms of the previous definition, the two metals are considered to be the output of manufacturing and only a small part of their total value is attributable to the mining industry in Tasmania. In the case of aluminium, no Tasmanian ores or concentrates are used and no value accrues to the Tasmanian mining industry. A substantial part of the value of the aluminium is, in fact, accounted for by imported materials. Zinc is produced from both imported and locally-produced concentrates, but only the value of the local concentrates produced at Rosebery is included as contributing to the total value of the Tasmanian mining industry. Prior to the 1977-78 Census of Mining Establishments, the 1969 preliminary edition of ASIC was used to provide a definition of the mining industry. As from 1977-78, the definition of the mining industry has been changed to that specified in the 1978 edition of the ASIC (Cat. No. 1201.0) which treats iron ore pelletising as part of the mining industry and not as part of manufacturing industry.

<sup>(</sup>a) Includes log equivalent of limbwood and billets.

# Location of Principal Mineral Deposits, Tasmania



## Historical

Tasmania's first mine opened at Port Arthur in 1834. In that year, it produced 61 tonnes of coal but closed just 10 years later due to the poor quality of the coal and other discoveries elsewhere. Major mineral discoveries were not made until later in the nineteenth century—tin oxide was first discovered near Mt Bischoff in 1871, silver-lead ore was discovered in the Zeehan-Dundas area in 1882 and the 'Iron Blow' copper ore outcrop near Mt Lyell was discovered in 1883. These and later discoveries led to the establishment of mining operations which have had a significant impact on Tasmania's growth. A more detailed historical background to the development of mining in the State is included in the 1976 and earlier editions of the Year Book and a 'West Coast Mining Chronology' is included in the 1968 edition.

### **Major Mining Companies**

Brief summaries on some of the major mining companies operating in Tasmania can be found in the 1984 and earlier Year Books.

### Statistics of Mineral Production

# Source of Data

Statistics relating to quantities of minerals produced (including assayed metallic content) are, in the main, obtained from the State Department of Mines and are supplemented, where necessary, with data obtained from the annual census of mines and quarries conducted by the Australian Bureau of Statistics, and from the Federal Bureau of Mineral Resources.

Other details of the mining industry such as employment, value of output, and costs of production, etc. are obtained from the annual census of mines and quarries, conducted by the Bureau. This census was first conducted in 1952 and the information obtained from each census was basically the same until 1968. As from 1968-69 the mining sector census was standardised in accordance with the concepts employed in the integrated economic censuses (see 'Integrated Economic Censuses' in Chapter 19 for a comparison between mining and other industries included in the integrated censuses).

Tasmania's larger mining operations, in particular metal mining, are located in the west of the State and are concentrated in an area from Queenstown to Savage River. A number of tin mines operate in the north-east of Tasmania but their combined output no longer compares with either former activity in that area or current operations in the west.

#### Metallic Minerals

The table that follows shows the quantity of metallic minerals produced in Tasmania for a six-year period:

Metallic Minerals: Production, Tasmania

Mineral	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83
		Tonnes				
Chromite concentrate	301	1 285	1 862	977	_	
Copper concentrate	70 668	77 039	64 791	80 802	68 686	n.p.
Copper-tin concentrate	1 806	1 980	2 239	1 916	3 189	1 955
Iron—Concentrate	1 869 607	2 271 990	2 191 979	2 175 383	2 020 551	n.p.
Oxide	13 793	15 525	15 946	20 600	25 490	n.p.
Lead concentrate	17 710	18 226	18 629	12 900	28 217	36 737
Lead-copper concentrate	27 760	24 719	24 185	22 328	31 999	24 968
Molybdenum concentrate	_		66	54	45	n.p.
Pyrite concentrate	252 469	110 942	15 720	. —	_	_
Tin concentrate	14 677	14 127	13 552	14 498	14 936	12 817
Tungsten concentrates—						
Scheelite concentrate	3 391	3 123	3 629	3 536	3 239	2 110
Wolfram concentrate	174	193	177	267	149	5
Zinc concentrate	142 568	131 096	131 645	94 636	146 943	150 552
		Kilograms	5			
Gold (not in concentrates)	1	1	1	_	_	_

Assayed Content: In the following table, the various concentrates have been grouped to show their content in terms of individual metals. The contents stated are as determined by assay and include all pay metals and metals which are a refiner's prize; totals compiled on this basis contain no allowances for losses in smelting and refining and therefore, in general, exceed the quantities actually recoverable. The table refers exclusively to minerals mined in Tasmania.

Assayed Contents of Metallic Minerals Produced, Tasmania

Mineral	1978-79	1979-80	1980-81	1981-82	1982-83
	Cadiun	(Tonnes)			
Zinc concentrate	177	173	126	206	n.p.
	Chromic O	xide (Tonnes)			
Chromite concentrate	603	1 040	567	-	
	Соррег	(Tonnes)			
Copper concentrate	20 174	16 948	21 147	17 860	n.p.
Copper-tin concentrate	457	480	401	681	n.p.
Lead concentrate	90	61	49	131	n.p.
Lead-copper concentrateZinc concentrate	3 343 407	3 077 394	2 645 290	3 901 460	3 026
		······································			n.p.
Total	24 471	20 960	24 532	23 033	n.p.
	Gold (K	(ilograms)			
Copper concentrate	460	400	467	419	n.p.
Lead concentrate	61	47	37	69	n.p.
Lead-copper concentrate	1 038	1 049	809	1 305	n.p.
Zinc concentrate	204	169	132	206	n.p.
Other sources	1	1	<del></del>		
Total	1 763	1 666	1 445	2 000	n.p.
	Iron	Tonnes)			
Iron concentrate	1 569 946	1 514 656	1 503 189	1 387 310	n.p.
	Lead	(Tonnes)			
Lead concentrate	11 726	11 763	7 734	17 124	n.p.
Lead-copper concentrate	5 155	5 562	6 020	8 288	6 389
Zinc concentrate	4 291	3 887	3 021	5 408	n.p.
Total	21 172	21 212	16 775	30 820	n.p.
	Mangane	se (Tonnes)			
Zinc concentrate	261	266	193	282	n.p.
	Molybdenu	n (Kilograms	)		
Molybdenum concentrate	_	25 209	19 863	16 873	10 215
	Silver (1	Kilograms)			·
Copper concentrate	2 887	2 863	3 875	2 748	n.p.
Lead concentrate	15 903	13 579	8 992	18 575	n.p.
	49 995	43 765	37 468	56 095	47 446
Lead-copper concentrate					
Zinc concentrate	12 133	10 439	8 002	12 403	n.p.

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Assayed Contents of Metallic Minerals Produced, Tasmania—con
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Mineral	1978-79	1979-80	1980-81	1981-82	1982-83
	Sulphur	(Tonnes)			
Lead concentrate	3 437	3 511	2 540	5 413	n.p.
Lead-copper concentrate	7 558	7 193	6 357	8 955	n.p.
Pyrite concentrate	52 986	7 637		_	
Zinc concentrate	42 830	43 362	31 593	47 229	n.p.
Total	106 811	61 703	40 490	61 597	n.p.
	Tin ('	Tonnes)			
Copper-tin concentrate	47	45	29	(a) 40	n.p.
Tin concentrate	6 913	6 755	7 030	7 157	6 479
Total	6 960	6 800	7 059	7 197	n.p.
	Tungstic O	cide (Tonnes)			
Scheelite concentrate	2 280	2 716	2 771	2 355	1 534
Wolfram concentrate	139	127	189	108	n.p.
Total	2 419	2 843	2 960	2 463	n.p.
	Zinc (	Tonnes)			
Lead concentrate	2 099	2 498	1 893	3 691	n.p.
Lead-copper concentrate	2 546	2 984	2 763	3 835	3 154
Zinc concentrate	68 429	67 765	48 844	76 688	n.p.
Total	73 074	73 247	53 500	84 214	n.p.

<sup>(</sup>a) Estimated.

## Fuel Minerals (Coal)

The only fuel mineral mined in Tasmania is coal. There are known deposits of coal throughout much of Tasmania but the most important are those located in the Fingal Valley in the north-east. The Fingal Valley deposits were discovered in 1866.

In 1890 Tasmania produced 55 000 tonnes of coal and production continued to rise until a peak of over 300 000 tonnes was reached in 1959-60. Subsequently, there was a marked decline due to competition from fuel oil, particularly in manufacturing industries. The downward trend in production has been reversed from the late 1970s with major Tasmanian manufacturers switching back to coal from oil as their fuel for operations. Production details for recent years (in tonnes) are as follows: 1977-78, 195 291; 1978-79, 252 800; 1979-80, 279 197; 1980-81, 304 727; 1981-82, 395 347; and 1982-83, 548 354.

# Non-Metallic (Excluding Fuel) Minerals

The quarrying of limestone is the earliest recorded activity in the field of non-metallic mineral mining in the State, burnt lime being sought as a base for building mortar. Production of this non-metallic mineral has gradually increased to meet a rising demand in various industrial processes. Large exports of limestone were made in the period 1918-1947, when the BHP Co. Ltd operated quarries at Melrose on the North-West Coast.

The next table shows the Tasmanian production of non-metallic minerals for a six-year period:

#### FORESTRY, MINING AND FISHERIES

# Non-Metallic (Excluding Fuel) Minerals Production, Tasmania (Tonnes)

Mineral	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83
Clays and shales—						
Brick	. 137 593	136 947	143 784	162 830	151 020	102 290
Other	. 41 684	54 406	55 475	50 970	73 599	62 248
Dolomite		15 018	17 464	9 872	13 632	17 755
Limestone (a)	. r713 606	r 758 573	r 711 656	r 666 122	r 822 779	791 346
Peat moss	. 372	345	880	702	565	890
Pebbles	. 1 566	1 418	1 044	1 029	1 220	n.p.
Silica (b)		r 57 386	r 92 139	r 36 729	r 44 896	38 191

- (a) Excludes quantities used directly as building or road construction material.
- (b) For glass, chemical, etc. manufacturing.

## Construction Materials

In addition to the types of mining and quarrying previously described there is the quarrying of construction materials (for buildings, roads, etc.) such as crushed and broken stone, gravel and sand. This type of activity also is taken into account when placing a value on the output from mines and quarries, measuring their level of employment, etc.

### Census of Mining Establishments

Mining Establishments—Summary of Operations

The tables that follow give results for the mining censuses from 1977-78 to 1982-83:

Census of Mining Establishments Summary of Operations by Industry Sub-division, Tasmania

Particulars	1977- 78(a)	1978-79	1979-80	1980-81	1981-82	1982-83
	М	etallic Miner	als			
Establishments (b)no.	16	18	23	30	25	19
Persons employed (c)—						2 1 1 2
Malesno.	3 679	3 735	3 883	4 035	3 689	3 1 1 9
Femalesno.	177	183	186	202	195	157
Totalno.	3 856	3 918	4 069	4 237	3 884	3 276
Wages and salaries\$'000	52 759	58 712	70 178	78 574	84 601	77 967
Turnover\$'000 Stocks—	233 950	277 224	340 872	336 544	321 866	353 297
Opening\$'000	23 881	24 485	26 496	40 183	40 245	41 401
Closing\$'000	24 404	26 271	40 101	39 932	42 040	66 841
Purchases, etc. (d)\$'000	83 442	106 647	123 234	158 780	171 407	195 087
Value added\$'000	151 031	172 363	231 243	177 513	152 254	183 290
Rent, leasing						
expenses\$'000	1 330	1 464	2 199	2 113	2 672	1 126
Fixed capital						
expenditure (e)\$'000	16 163	18 687	28 927	35 487	24 416	15 765
		Coal				
Establishments (f)no.	1	1	1	1	1	1
	Cons	truction Mat	erials			
Establishmentsno. Persons employed (c)—	33	32	34	29	27	25
Malesno.	191	160	221	187	143	136
Femalesno.	6	14	20	20	6	12
Totalno.	197	174	241	207	149	148
Wages and salaries\$'000	2 150	1 834	3 099	2 850	1 941	2 235
Turnover\$'000	10 173	10 522	10 522	14 912	14 409	16 776
Stocks—	10 175	10022				
Opening\$'000	609	525	1 472	1 955	1 503	1 267
Closing\$'000	745	1 174	1 996	1 608	1 307	1 722
Purchases, etc. (d)\$'000	3 849	5 414	6 852	7 583	6 851	7 926

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# Census of Mining Establishments Summary of Operations by Industry Sub-division, Tasmania—continued

Particulars	1977- 78(a)	1978-79	1979-80	1980-81	1981-82	1982-83
	Cons	truction Mat	erials			
Value added\$'000	6 459	5 757	9 358	6 982	7 362	9 305
Rent,leasing expenses\$'000 Fixed capital	227	171	207	225	884	1 474
expenditure (e)\$'000	3 896	2 308	1 042	626	641	202
	Other N	on-Metallic	Minerals			
Establishments (f)no.	14	15	11	10	10	10
		Total Mining	3			
Establishments (b)no. Persons employed (c)—	64	66	69	70	63	55
Malesno.	4 056	4 114	4 312	4 439	4 055	3 472
Femalesno.	185	203	215	233	211	180
Totalno.	4 241	4 317	4 527	4 672	4 266	3 652
Wages and salaries\$'000	57 136	63 122	75 878	84 699	90 963	85 531
Turnover\$'000 Stocks—	251 117	296 465	366 763	363 053	352 039	388 390
Opening\$'000	24 671	25 459	28 529	42 818	42 868	43 667
Closing\$'000	25 397	28 091	42 785	42 640	44 335	69 633
Purchases, etc. (d)\$'000	89 338	115 135	133 624	170 172	183 819	208 548
Value added\$'000	162 505	183 963	247 396	192 703	169 688	205 807
Rent, leasing	102 505	103 703	21, 370	1,52,795	10, 000	200 007
expenses\$'000 Fixed capital	1 762	1 937	2 711	2 733	4 004	3 045
expenditure (e)\$'000	20 437	21 689	31 020	39 931	28 297	17 783

- (a) Based on the 1978 edition of ASIC. Data for earlier years are based on the 1969 ASIC (preliminary). The main change from the 1969 to the 1978 ASIC was the transfer of iron-ore pelletising plants from the 'manufacturing' industry division to 'mining'.
- (b) Excludes small tin producing establishments with a value of sales of less than \$20 000.
- (c) At last pay-period in June; includes working proprietors.
- (d) Purchases, transfers in and selected expenses.
- (e) Outlay on fixed tangible assets less disposals.
- (f) Other data not available for separate publication but included in 'Total Mining'.

### Mineral Exploration (Other than for Petroleum)

The statistics in the following tables relating to exploration for minerals other than petroleum are derived from the annual census of mineral exploration.

'Mineral exploration' consists of the search for mineral deposits, the appraisal of newly-found deposits, and the further appraisal of known deposits (including those being worked) by geological, geophysical, geochemical and other methods (including drilling). Exploration for water is excluded. The construction of shafts and adits primarily for exploration purposes is included.

The data obtained in the mineral exploration census are divided into the following categories:

Exploration on Production Leases: Relates to exploration carried out on a production lease currently producing, or under development for production of, minerals other than petroleum. Mines included in this section of the mineral exploration census correspond closely to those in the annual census of mining and quarrying with the exception of a limited number of itinerant prospectors and small mines excluded from the collection.

Exploration on Other Areas: Relates to: exploration carried out on areas covered by exploration licences issued by the Department of Mines for minerals other than petroleum; and exploration by private enterprise for minerals which is not directly connected with areas under lease or licence, including general surveys, aerial surveys, report writing, map preparation and other off-site activities not directly attributable to particular lease or licence areas.

The following table shows expenditure details relating to mineral exploration (other than for petroleum) in Tasmania for recent years:

Mineral Exploration Other Than for Petroleum: Expenditure, Tasmania (\$'000)

Year	Wages and salaries paid	Stores, materials, fuels, etc. purchased	Payments to contractors (a)	Other current expenditure (b)	Net capital expenditure (c)	Total
		Private E:	xploration on Pr	oduction Lease:	s	·
1977-78		187	965	218	57	1 730
1978-79		168	1 499	198	30	2 330
1979-80		126	1 463	256	53	2 294
1980-81		398	2 960	305	179	4 8 1 6
981-82		414	3 015	177	22	4 885
982-83	1 072	560	2 272	314	133	4 351
		Ot	ther Private Exp	loration		
977-78		566	2 387	1 073	311	5 681
1978-79		559	2 936	1 732	145	6 983
979-80		937	4 882	2 138	199	10 405
1980-81		1 227	5 541	4 208	644	14 916
1981-82		1 704	6 857	4 431	478	17 949
982-83	4 842	984	4 393	3 685	375	14 280
		To	otal Private Exp	loration		
977-78	1 648	753	3 352	1 291	367	7 411
978-79		727	4 436	1 929	175	9 313
979-80	2 647	1 063	6 345	2 394	252	12 699
980-81		1 625	8 501	4 513	823	19 732
981-82	5 737	2 118	9 872	4 608	500	22 834
982-83	5 914	1 544	6 665	4 000	508	18 631
		Total	Government Exp	oloration (d)		
1977-78	502	52		58	14	626
978-79	544	65	_	65	44	717
979-80	628	66		114	203	1 011
980-81		66	_	80	211	854
981-82	569	44	_	70	81	764
982-83	568	53		74	76	770
		Total Prive	ate and Governm	ent Exploratio	n	
977-78	2 150	805	3 352	1 349	381	8 037
978-79	2 589	792	4 436	1 994	219	10 030
979-80	3 274	1 129	6 345	2 508	455	13 710
980-81	4 768	1 691	8 501	4 593	1 034	20 586
981-82	6 306	2 162	9 872	4 678	581	23 599
. 982-83	6 482	1 597	6 665	4 074	584	19 401

<sup>(</sup>a) Amounts paid to contractors, geological consultants, etc., employed to carry out exploration activities.

<sup>(</sup>b) Other current exploration expenditure such as maintenance expenses, map preparation, aerial surveys, and rent and fees paid to governments for mineral tenements.

<sup>(</sup>c) Net capital expenditure is defined as expenditure on fixed tangible assets less disposals.

<sup>(</sup>d) Exploration by Tasmanian Department of Mines.

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The next table shows the total drill hole depths drilled, sunk or driven in mineral exploration (other than for petroleum) in recent years:

Mineral Exploration Other Than for Petroleum: Metres Drilled, Sunk or Driven, Tasmania

		Drilling				
Year	Core (	a) Non-core	(b) Total			
Private Explorat	tion on Productio	n Leases				
1977-78	25 868	197	26 065			
1978-79			32 771			
1979-80		2 667	34 749			
1980-81		1 023	58 970			
1981-82	52 460	293	52 753			
1982-83	43 134		43 134			
Other Pr	ivate Exploration	2				
1977-78	25 779	3 645	29 424			
1978-79	30 048	3 000	33 048			
	38 735	2 603	41 338			
980-81	45 181	9 124	54 305			
	40 367	17 039	57 406			
1982-83	29 029	20 436	49 465			
Total Pri	ivate Exploration	s				
1977-78	51 64		55 489			
1978-79	62 819		65 819			
979-80	70 81	5 270	76 087			
980-81			113 275			
1981-82			110 159			
1982-83	72 163	3 20 436	92 599			
Total Govern	nment Exploratio	n (c)				
1977-78			5 134			
1978-79	5 607	_	5 607			
	10 460	_	10 460			
980-81			11 005			
1981-82			5 338			
1982-83	7 032		7 032			
Total Private and	d Government Ex	ploration				
1977-78			60 623			
1978-79	68 420	3 000	71 426			
979-80			86 547			
1980-81	114 13:	3 10 147	124 280			
1981-82	98 16:		115 497			
1982-83	79 19:	5 20 436	99 631			

<sup>(</sup>a) Diamond drilling, or any kind of drilling in which cores are taken.

#### **FISHERIES**

#### General

The Tasmanian saltwater fishing industry involves an estimated 925 licensed fishermen and crew who operate 890 licensed fishing vessels from the State. The species which comprise the annual catch are not only scale fish but also include elasmobranchs (sharks), molluscs (scallops, oysters, abalone) and crustaceans (southern rock lobster).

<sup>(</sup>b) Alluvial, percussion and other drilling in which cores are not taken.

<sup>(</sup>c) Exploration by Tasmanian Department of Mines.

In 1983-84 the catch of fish, molluscs, crustaceans and fresh water species totalled 17 356 tonnes which was a decrease of 7 per cent on the 1982-83 figure of 18 739 tonnes.

The Department of Sea Fisheries, which replaces the Fisheries Development Authority, controls saltwater fisheries and the Inland Fisheries Commission controls freshwater fisheries. Most freshwater fish are caught for sport but eels have been caught for commercial purposes and the farming of trout is currently being undertaken.

Rainbow trout are raised commercially on trout farms at Bridport, Russell Falls and Howell. There are rainbow and brown trout in Tasmanian lakes and rivers (introduced as exotic species) but these may only be caught by licensed sportsmen and may not be sold.

A commercial freshwater fishery for the short-finned eel was established in 1965. Production in 1983-84 was 24.4 tonnes which was 1 per cent below the 24.7 tonnes recorded for 1982-83.

## Fish Varieties and Species

The following table lists the main Tasmanian commercial fish varieties and species:

#### Main Commercial Fish Varieties and Species, Tasmania

Variety	Species	Variety	Species
Eel	Lovettia sealii Salmo gairdnerii Fam. Pleuronectidae	Tuna	Thunnus maccoyii T. alalunga Katsuwonus pelamis
	barbatus	Mackerel	Trachurus declivis
Mullet	Aldrichetta	Snoek (barracouta)	
Trevalla, deep sea	forsteri Hyperoglyphe antarctica	Southern rock lobster	Jasus novaehollan- diae
Warehou Salmon Morwong	Arripis trutta	Oyster	Ostrea angasi Crassostrea gigas
Trumpeter	macropterus	Scallop	Pecten meridionalis Equichlamys bifrons Mimachlamys asperrimus
Flathead	Platycephalus richardsoni Platycephalus speculator Platycephalus bassensis Leviprora	Abalone	Notohaliotis ruber Schismotis laevigata
Shark	laevigata Mustelus antarcticus Galeorhinus australis		

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### **Fisheries Statistics**

Source of Data and Method of Presentation

Statistics presented in this section have been supplied principally by the Tasmanian Department of Sea Fisheries. They are derived from returns collected annually from fish buyers and processors. In the preparation of fisheries production statistics, the quantities are generally in terms of the form in which the catch is taken from the water. For example, the statistics of fish production are in terms of 'estimated live weight' which is calculated from landed weights by using conversion factors for the various species. These conversion factors allow for the fact that the quantities of fish reported are frequently in a gutted, headed and gutted, or otherwise reduced condition. Crustaceans are reported on a 'whole weight' basis and molluscs (edible) on a 'gross (in-shell) weight' basis.

The actual edible yield varies depending on types of fish and methods of preparation. Barracouta yield about 51 per cent of live weight when filletted, and shark about 60 per cent when headed and gutted. The edible flesh in molluscs represents only a small portion of the in-shell weight. Approximately 1 kg of scallop flesh equals 4.5 kg in-shell weight and 1 kg of abalone flesh equals 2.25 kg in-shell weight.

The catch is generally defined as that landed in Tasmanian ports, regardless of whether it is caught in Tasmanian waters or not, or whether it is caught by Tasmanian fishermen or not. Shark, southern rock lobster and other fish taken by Victorian based fishermen in Tasmanian waters, but landed in Victoria, are included in the Victorian catch and excluded from Tasmanian figures on the basis that the catch influences the Victorian rather than the Tasmanian economy.

Details of production refer only to recorded commercial production. In view of the importance of amateur fishermen in certain types of fishing, details shown cannot be taken as representing the whole catch. In addition, it is likely that the figures shown understate, to some extent, the full commercial catch since no information is available on fish taken for sale by persons not licensed as professional fishermen.

Production

Fish Production by Type, Tasmania, Estimated Live Weight, (Tonnes) (a)
(Source: Tasmanian Fisheries Development Authority)

Туре	1978-79	1979-80	1980-81	1981-82	1982-83	1983-84
Australian salmon	451	283	200	417	211	137
Barracouta (snoek)	38	7	2	1	2	16
Cod	3	2	2	2	4	2
Flathead	186	62	129	149	58	31
Flounder		7	8	11	8	7
Garfish	21	39	49	36	20	37
Morwong	43	10	118	67	17	19
Mullet	3	4	5	3	2	2
Shark	1 490	1 210	1 288	1 086	793	614
Trevalla, deep-sea			220	202	263	109
Warehou	109	142	65	35	52	22
Trumpeter	4	4	8	13	12	6
Tuna	57	31	27	14	1	3
Other (b)	199	388	406	461	404	385
Total	2 605	2 188	2 527	2 498	1 847	1 390

<sup>(</sup>a) Estimated live weights are calculated from landed weights by conversion factors since quantities of fish are frequently reported in a gutted, headed and gutted, or otherwise reduced condition (e.g. barracouta and shark).

<sup>(</sup>b) Includes bait and freshwater species.

The fish types shown in the above table appear without any further description to identify the particular species but a specification of the more common species for each type is given earlier in this section. The figures, derived from fish buyers' transactions, do not reflect the actual production from Tasmanian waters due to: landing at Tasmanian ports of fish caught in interstate waters; landing at interstate ports of fish caught in Tasmanian waters; and direct sales by fishermen.

#### Crustaceans and Molluscs

In terms of value, the principal items in the Tasmanian catch are abalone and southern rock lobster (crayfish). The next table shows details of production of crustaceans and molluscs:

Crustaceans and Molluscs: Production by Type, Tasmania (Source: Tasmanian Fisheries Development Authority)

					- 0 /	
Туре	1978-79	1979-80	1980-81	1981-82	1982-83	1983-84
		Crustaceans ()	Whole weight,	tonnes)		
Southern rock lobster	1 305	1 340	1 553	1 713	1 887	1 805
		Molluscs (In-	shell weight,	tonnes)		
Abalone Scallops Oysters Mussels Squid Octopus	3 100 1 077 116 9 72 5	3 214 3 829 105 19 63 3	3 743 3 359 190 11 10 2	4 194 7 577 353 18 15	2 968 11 573 569 11 44 13	4 769 8 702 645 32 8 3
Total	4 380	7 233	7 315	12 157	15 177	14 158

Abalone: Development of the Tasmanian abalone fishery dates from 1964 when divers commenced taking abalone for export. The catch increased from 33 tonnes in 1963-64 to 3 488 tonnes in 1970-71 but then fell away before recovering in the late 1970's. In 1981-82 a record catch of 4 194 tonnes was harvested, but then fell to 2 968 tonnes in 1982-83. In 1983-84, 4 769 tonnes were harvested.

Rock Lobster: Total production of rock lobster in Tasmania during 1983-84 was 1 805 tonnes which was slightly down on the previous year's figure of 1 887 tonnes.

Scallops: For many years Tasmania was the only State in Australia with a commercial scallop fishery; in 1955-56 Tasmania was joined by Queensland, but continued to retain its dominant position in the industry. However, in 1963 Tasmanian fishermen started a Victorian fishery in beds known to exist in Port Phillip Bay and the new site in its first year (1963-64) produced more than twice the quantity of the Tasmanian fishery. No scallops were dredged from Tasmanian waters in 1970-71, and only 52 tonnes in 1971-72. Following the discovery of new beds in Bass Strait, the Tasmanian catch increased to 1 261 tonnes in 1974-75, but dropped away in the period from 1975-76 to 1977-78. The catch increased significantly in 1981-82 when the production more than doubled the previous year's figure. In 1983-84 the catch was 8 702 tonnes, 25 per cent below the record 1982-83 level of 11 573 tonnes.

# Value of Production—Fishing

The table that follows gives details of gross values of fishery products. (For definition of 'gross value' see later section 'Value of Production'.)

# Fisheries: Gross Value of Production, Tasmania (\$'000)

Particulars	1978-79	1979-80	1980-81	1981-82	1982-83	1983-84
Fish (a)	2 482	2 994	3 654	3 613	3 166	3 307
Crustaceans (b)	5 904	6 938	8 385	9 639	11 787	12 859
Molluscs	6 250	10 531	14 476	19 644	16 187	23 532
Total	14 636	20 463	26 514	32 896	31 140	39 698

- (a) Includes value of seaweed harvested for production of alginate.
- (b) Mainly southern rock lobster but includes crabs.

# Marketing

The majority of seafoods landed in Tasmania are sold in a processed form either on interstate or overseas markets and are dependent to some extent on changing world trade and marketing conditions for their future viability.

Factors in the international sphere which can affect Tasmanian fisheries include:

- variations in exchange rates between Australia and our major overseas trading partners;
- general economic conditions in overseas countries including inflation factors, employment levels, consumer confidence and Government policies;
- international interest rates; and
- competition from other world seafood suppliers.

The abalone fishery, being the only purely export based fishery, particularly reflects current world trade and marketing conditions. During the 1982-83 period severe marketing difficulties afflicted the abalone fishery due to a combination of the following factors: buyer resistance to excessively high prices, reflecting the then current economic climate; record production and stock levels, and a general lessening of demand. This led to the industry implementing measures to reduce catches in an effort to reduce processed stocks and improve buyer confidence.

Marketing strategies in the rock lobster and scallop fisheries are also largely determined by the current situation in international markets which usually dictate the amounts of product available domestically as well as the domestic prices.

The major international markets for Tasmanian seafoods include Japan, Hong Kong, Singapore and the United States for abalone; France, New Zealand and Belgium for scallops; the United States for rock lobster tails; and Japan, Hong Kong and the United States for whole rock lobster.

Tasmania also imports significant quantities of seafoods, particularly those species which are in short supply or unavailable locally. These include prawns, some scale fish species in both fresh and frozen forms, most canned seafoods and some smoked varieties.

Fishery Products: Value of Exports, Tasmania

(\$ 600)								
Particulars	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83		
Fish (a)—Overseas	50	81	215	15	135	192		
Interstate	607	587	441	529	188	370		
Southern rock lobster—								
Overseas	676	774	1 548	1 439	2 409	3 672		
Interstate	1 780	3 853	3 267	4 156	5 168	7 486		
Molluscs-Overseas	4 385	7 496	13 733	18 789	21 879	20 562		
Interstate	136	195	189	303	669	1 139		
All types—Overseas	5 111	8 351	15 497	20 243	24 422	24 425		
Interstate		4 635	3 897	4 988	6 026	8 996		
Total	7 634	12 986	19 394	25 231	30 448	33 421		

(a) Includes fresh and frozen fish and fish preserved in tins.

## Department of Sea Fisheries

#### General

The Tasmanian Fisheries Development Authority was established on 1 December 1977 under the provisions of the *Fisheries Development Act* 1977 and was replaced on 21 February 1985 by the Department of Sea Fisheries. The Department has the following objectives:

- the promotion and development of the fishing industry that is carried on in or from Tasmania;
- the maintenance of proper standards with respect to fish and fish products intended for consumption in, or for export from, Tasmania both as to quality and as to the methods of handling, processing, storage, packing and transport;
- the undertaking of research, exploratory and experimental work related to the management of the living resources in the waters around Tasmania and to the fishing industry of Tasmania.

The management of the Tasmanian fisheries in tidal waters is the responsibility of the Minister for Primary Industry under the Fisheries Act 1959. Prior to December 1977 that Act was administered by the Fisheries Division of the Department of Agriculture and later, by the Tasmanian Fisheries Development Authority. Administrative responsibility is now vested in the Department of Sea Fisheries.

# Fisheries Management

Staff of the Department are responsible to the Minister for Sea Fisheries for the implementation of the provisions of the Fisheries Act where it relates to tidal waters. These responsibilities principally relate to the monitoring and management of commercial and recreational fishing.

Fishermen are required to furnish monthly returns of their fishing activities which indicate catches, place of fishing and amount of time spent and equipment used. Fish processors provide monthly statistics on purchases and prices. This information, together with the measurement of samples of the catch, is used to monitor each fishery and, with the help of research developed mathematical models, predict the likely future state of the fishery and the effect if fishing effort changes. This monitoring provides information which together with economic data aids in determining what changes might be necessary to fisheries laws to protect, conserve and rationally utilise each fish resource.

Since 1965 Tasmania has closely managed its valuable fisheries such as rock lobster and abalone and required detailed licensing procedures and comprehensive controls on fishing methods. (Such measures were first introduced for the scallop fishery in the 1940s.) A licensing section and a field force of inspectors implement this system. Inspectors are decentralised at seven centres and equipped with modern fast and ocean-going patrol vessels. Fisheries inspectors also are the principal points of contact between the Department and fishermen and provide the immediate source of information from Department to industry and advise the Department of matters concerning the industry.

## Resource Development Research

A major task of the Department has been to assist diversification of the State's fishing industry and expand the utilisation of under-developed or partially developed marine resources. In the catching sector the principal methods used have been surveys and feasibility fishing and extension activities in fishing gear.

Feasibility fishing is a special form of exploratory fishing authorised by the Commonwealth and State Governments to accelerate an understanding of the undeveloped resources of the expanded Australian fishing zone. Foreign and/or joint foreign and Australian companies are authorised to use foreign vessels and crews under strictly controlled arrangements to evaluate resources under commercial or near commercial conditions. This opportunity to increase knowledge at little or no cost has been used to investigate the squid resource with Korean and Taiwanese jigging vessels.

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Research activities are centred at the Department's laboratory at Taroona and on the research vessel 'Challenger'. In addition specifically chartered vessels also collect information generally whilst engaged in surveys or special development projects.

Since the establishment of the Department, research has concentrated on developing aquaculture techniques and achieving a better understanding of demersal fish resources. Techniques in hatching and culturing of pacific and native oysters and commercial and queen scallops, have been investigated. Current research includes focusing on the potential for Atlantic salmon farming in Tasmania, as well as investigations into deep water trawl and orange roughy resources. The principal projects are supported by work in the field of marine chemistry, histology, data analysis and environmental monitoring.

# Processing and Retailing Development

A program of regular visits to processors and retailers ensures close contact with the industry. Developments in other countries are monitored and up to date advice is available on most topics. Assistance with the setting up of plants, vessels and shops has been provided and other activities include the investigation of products and processes. An increased effort to improve quality awareness throughout the industry is currently under way.

# Promotions and Market Development

The Department continually undertakes an active promotional and market development program in conjunction with the industry, cooking demonstrations to school and community groups throughout the State, a recipe and poster service and exhibits at industry and trade fairs.

Market research and sampling is undertaken by the Department and circulars are regularly produced to advise the industry of current overseas market conditions and new market opportunities.

# **Publications**

The Department's magazine *Fintas*, a quarterly publication, is the communication medium of the industry providing information on all Department activities, market situations, regulations as well as articles of general interest.

The Tasmanian Seafood Scene also published quarterly, provides useful information to caterers, distributors and wholesalers regarding the use of various Tasmanian seafoods.

The Tasmanian Seafood Cookbook, is the first book prepared by the Department to promote the general use of Tasmanian seafoods.

A recently completed publication by the Department is the volume *Fishes of Tasmania*, the first comprehensive work on Tasmanian salt and freshwater fish, and is available in three formats.

Research officers also prepare a number of scientific papers based on their investigations which are published in various journals.

#### Training

The Department's association with such bodies as the Australian Maritime College and the Tasmanian Fishing Industry Committee ensures that all training needs of the industry are met. Courses offered by the Department include fish handling, quality control, fish filleting, scallop splitting, business management and gear development.

A further aspect of training provided by the Department exists in the fish cooking demonstrations made available to schools throughout the State.

#### Industry Assistance

A Fisheries Finance Plan which was introduced in February 1978 operates in association with the Agricultural Bank of Tasmania (now Tasmanian Development Authority) and links developmental aspects of the Fisheries Development Act 1977 with the State Advances Act.

The aim of the Plan is to provide a range of financial incentives through concessional interest rates and deferment of capital repayments to stimulate investment in the development of the fishing industry. Lending is conditional upon performance in the various developmental fisheries and to date the majority of assistance provided under the plan has been applied to the aquaculture industry.

The State Government has for many years provided capital funds for port facilities for fishermen such as jetties and slipways. The Department supervises these facilities and acts with industry representatives and the Department of Main Roads in the provision, maintenance and operation of them.

#### **Further References**

ABS Publications Produced by the Tasmanian Office

Sawmilling, Woodchipping, etc. Statistics, Tasmania (8203.6), quarterly. Mining Industry, Tasmania (8401.6), annual.

ABS Publications Produced by the Canberra Office

ASIC, Australian Standard Industrial Classification (irregular, 1978 edition released June 1978) — Vol. 1: The Classification (1201.0)

Vol. 2: Alphabetic Index of Primary Activities (1202.0)

Mineral Production (8405.0), annual.

Fisheries (7603.0), annual.

# **CHAPTER 14**

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# Chapter 14

# MANUFACTURING

#### INDUSTRIAL DEVELOPMENT

# Primary-Secondary Relativity

Prior to World War II, there were few large manufacturing establishments in Tasmania. The economy of the State was dominated by primary industries which, in 1938-39, accounted for 60 per cent of the net value of production of all recorded industries.

Post-war expansion of factory activity, particularly in the 1950s and 1960s, has made the State an important supplier of manufactured goods and processed materials. Major factories which have been established since World War II include producers of chemicals, woodpulp, textiles, processed foods, industrial equipment, refined aluminium, manganese alloys, iron ore pellets and woodchips. Steady, large-scale development of the State's hydro-electricity resources assisted such expansion.

Since the early 1950s, the manufacturing sector has been predominant in terms of its economic significance to the State and now has a value added more than double that of agriculture and mining combined. (See the section 'Economic Censuses and Surveys' in Chapter 19 for an inter-sector comparison of various industry sectors.)

# Tasmania as a Site for Industry

Advantages

Tasmania has certain advantages which have attracted new industrial enterprises. These include:

Hydro-Electric Power: The availability of competitively priced, bulk electricity for power intensive industries (e.g. metal smelting and refining, heavy chemicals, paper and paper-pulp making) has had a significant influence on Tasmania's industrial development in the past and is discussed in greater detail in the next chapter.

Raw Materials. Locally available raw materials provide the basis for many industries such as textiles, dairy foods and vegetable processing. Large timber reserves have led to the establishment of pulp and paper manufacturing, sawmilling and woodchipping. Other valuable natural resources such as the rich agricultural land, a wealth of minerals, and sea products, continue to support existing industries and provide further development opportunities.

Industrial Land, Harbours and Shipping: The decentralised nature of the State and a policy of making provision for industry in each main region has enabled industrial land to be both readily available and cheap. Its proximity to deep-sea ports is another factor influencing the expansion of industry in and around the four main centres of population (Hobart, Launceston, Burnie and Devonport). The associated ports are fully equipped to handle unitised, containerised, roll-on/roll-off and orthodox cargoes, as well as cargo in bulk form. They are served by overseas and interstate ships using modern cargo handling techniques.

Water Resources: In some parts of the world, water resources are inadequate; shortage of water and the high cost of conservation, re-use and 'purification' have become major problems in the expansion of industry. This is not the situation in Tasmania where

clean, fresh water is abundant. The terrain favours the economical construction of high-level storages, while run-of-the-river pumping schemes are feasible at many sites.

Lifestyle: The quality of life in Tasmania, which is the envy of many persons interstate and overseas, has also been an indirect attraction to entrepreneurs in considering Tasmania as a location for their enterprise.

#### **Tasmanian Development Authority**

The Tasmanian Development Authority commenced operation on 1 March 1984 having been established by the amalgamation of the government agencies: the Agricultural Bank, the Department of Industrial Development, and the Office of Special Adviser (Development Finance).

The aim of the Authority is to encourage and promote the balanced economic development of Tasmania in such a manner as will best contribute to:

- the stability of business undertakings in Tasmania;
- the maintenance of maximum employment in Tasmania; and
- the prosperity and welfare of the people of Tasmania.

Overall management of the Authority lies with the Board which comprises private sector leaders. However, ultimate responsibility rests with the Minister for State Development.

Members of the Board are:

Mr. Jim Rickard, Chairman of the Board and Managing Director, M.T.M. Limited.

Sir Harold Cuthbertson, President of the Savings Bank of Tasmania and Managing Director, Blundstone Pty Ltd.

Mr Jack Edwards, President, Launceston Bank for Savings.

Mr Charles Clements, Chairman and Managing Director, Clements Marshall Consolidated Ltd.

Mr Philip Chandler, Managing Director of the Authority.

There are three main divisions in the Authority under the direct control of the Managing Director. Briefly, their responsibilities are:

## Finance Division

Rural loan program including:

- Agricultural Development Plan:
- Fisheries Finance Plan;
- the Young Farmer Establishment Finance Scheme;
- long term lending to primary producers;
- disaster relief:
- · restructuring finance; and
- loans, grants and guarantee recommendations to the private sector.

Home loan program provides advice and assistance in examining the financial viability of projects, businesses and, where necessary, business reconstruction.

## Corporate Services Division

- mainly internal administration:
- debtor administration;
- funds management:
- · taking of security for advances; and
- internal control.

#### The Development Division

• provision of assistance and advice on a broad range of matters affecting existing business with the focus being on expansion, diversification, product improvement, incentives, and training;

- provision of a small business advisory service and education programs;
- identification and development of new industries;
- identification of resource development opportunities;
- facilitation of government approvals;
- provision of a comprehensive marketing, research and product promotion service:
- promotion of the Authority within Tasmania;
- promotion of Tasmania interstate and overseas as a desirable investment location and a source of quality products and services;
- corporate and economic research; and
- development of an inventory of financial incentives and a range of industry specific incentive packages.

**Major Industries** 

Source of Data: In normal circumstances, the Bureau of Statistics does not publish information relating to any single enterprise or establishment, and treats any such information it collects as strictly confidential. It does, however, publish statistical aggregates where they do not directly or indirectly reveal the operations of any single informant. A description of industrial development without mentioning individual organisations is not very illuminating; therefore, the Tasmanian Development Authority has prepared the following section and accepts responsibility for the information given.

Associated Pulp and Paper Mills (Burnie, Wesley Vale, Long Reach, Triabunna): This group of companies which is a wholly-owned subsidiary of North Broken Hill Holdings Ltd, is a major Australian integrated forest products complex and Australia's principal producer of fine printing and writing papers, magazine papers and coated papers. In Tasmania, the Company operates major manufacturing complexes at four centres: Burnie—where it commenced paper production in 1938; present annual capacity of the Burnie pulp and paper plant is 130 000 tonnes. In addition, the Company presently has three sawmills at Burnie and Wynyard through its wholly owned subsidiary company, Burnie Timber Pty Ltd, but at present, only two are operating. The Company also acquired, in 1979, Tasmanian Plywood Mills Pty Ltd which is based at Somerset. Wesley Vale—In 1970 the first stage of an integrated pulp and paper complex was completed when the first paper machine commenced production. The machine has an annual capacity of about 65 000 tonnes of paper. Production at Wesley Vale is mainly of magazine papers. A particle board factory, run by the subsidiary Burnie Timber Pty Ltd, also operates at Wesley Vale; annual production is about 15 million square metres. Long Reach—APPM completed its woodchip plant and made its first export shipment in 1972. The Company has long-term contracts for the export of woodchips to Japan. Triabunna—In 1979 APPM took over Tasmanian Pulp and Forest Holdings Ltd which operates a woodchip export mill at Triabunna and also has long-term contracts with Japan.

Australian Newsprint Mills Ltd (Boyer): Since beginning operations in 1941, this Company has increased its annual production of newsprint from 27 400 tonnes to its present capacity of 220 000 tonnes in Tasmania. The Company also operates a newsprint mill at Albury in New South Wales with an output of 180 000 tonnes per annum. ANM is Australia's only producer of newsprint and currently supplies approximately 85 per cent of Australia's requirement. The Boyer plant is being constantly upgraded and its product range expanded beyond standard newsprint. This is requiring continuing capital expenditure to improve product quality and productivity. In the past 12 months, \$2.5 million was spent on a cleaning system for one of the three paper machines on site and further expenditure is being planned. ANM is the largest company with its head office in Tasmania and indicates that there is an optimistic future for expansion of its operations in this State.

Cadbury Schweppes Australia Ltd (Claremont): In 1921 an association of three British confectioners established their Australian plant at Claremont, near Hobart. Today, the plant is the largest cocoa and confectionery factory in Australia. The factory employs some 700 Tasmanians and specialises in moulded chocolate blocks, fancy boxed assortments, cocoa, drinking chocolate and the well known Flake and Turkish Delight bars. Some 30 million litres of fresh Tasmanian milk are used each year, most of which is

collected and processed at a subsidiary dairy factory at Burnie. Large quantities of famous Cadbury Dairy Milk Chocolate are sent each year to the Company's sister factory in Victoria.

Cascade Group of Companies (Statewide): The Company is the oldest manufacturing company in Australia and is firmly established in the beverage industry at manufacturing, wholesale and retail levels. The Company manufactures alcoholic beverages through the only two breweries in the State: at Esk Breweries, Launceston (Boags Beer) and Cascade Brewery, Hobart (Cascade Beer). The Cascade Fruit Juices Division manufactures alcoholic cider under the brand names Mercury and Van Diemen, and also Apple Isle non-alcoholic cider, Ultra-C blackcurrant vitamin C syrup, soft drinks, pure fruit juices, fruit juice syrups, berry fruit pulps and concentrates for local and export distribution at Cascades, Hobart. The Company has large pastoral interests centred on Rushy Lagoon, a property of approximately 18 000 hectares situated 160km from Launceston. The wholesaling of wine and spirits is the largest operation in the State with major outlets in Hobart, Launceston and Ulverstone. The Company owns 44 hotels spread throughout the State, the majority of which are leased to individuals.

Coats Patons (Aust.) Ltd (Launceston): This Company first produced yarns in Tasmania over 60 years ago. The factory produces knitting yarns, both wool and synthetic, and annual production is approximately 1.5 million kilograms.

Comalco Aluminium (Bell Bay) Ltd (George Town): Australia's first aluminium smelter commenced production in 1955 at Bell Bay, owned by the then Australian Aluminium Production Commission, a joint venture of the Commonwealth and Tasmanian Governments, with an annual capacity of 12 000 tonnes of metal. In 1961, the plant and facilities were acquired by the present company and the capacity increased in stages to 117 000 tonnes per annum, with a current employment of 1 270. Products made include rolling block, extrusion billet, foundry alloy ingot, T-bar alloy, primary metal as ingot, T-bar, and granules. As associated company, Comalco Aluminium Powder, produces aluminium powder, aluminium paste, and high alloy metal powder briquettes.

Edgell-Birds Eye Division of Petersville Industries Ltd (Devonport, Ulverstone and Scottsdale): This company is Tasmania's leading processor of frozen and canned vegetables. The annual volume of raw materials required by the Devonport, Ulverstone and Scottsdale factories is approximately 207 000 tonnes, the main crops processed being potatoes, green peas and green beans and carrots.

Electrolytic Zinc Company of A/Asia Ltd (Risdon and Rosebery): Established in 1916, the factory at Risdon is the largest producer of zinc in Australia and the second largest electrolytic-zinc plant in the world. It exports an extensive range of zinc and zinc alloys to over 30 countries. The Risdon plant has the capacity to produce more than 600 tonnes of zinc per day. Apart from the zinc and zinc alloys, the company also produces cadmium, sulphuric acid, superphosphate, and aluminium sulphate. The zinc plant supplies a large proportion of Australia's total requirements.

Mine production capacity at the Company's West Coast mines at Rosebery is 650 000 tonnes of silver-lead-zinc-copper-gold ore per annum. The associated concentrating mill at Rosebery has capacity to treat 850 000 tonnes of ore per annum including treatment of ore from the Oue River mine.

McCain Foods (Aust) Pty Ltd (Smithton): McCain purchased the Smithton factory of General Jones in June 1984. The factory produces frozen vegetables, of which the main brands are Copper Kettle, Pict and McCain. Early in 1985 a new corn processing line was installed; a new box packaging line was also introduced.

Goliath Portland Cement Co. Ltd (Railton): This company is a wholly owned subsidiary of Goliath Cement Holdings Limited and has been involved in cement production in Tasmania since 1928. With installation, in 1980, of new plant and equipment using the most modern technology currently available, cement production capacity was lifted to 750 000 tonnes per annum. Plans are complete to install additional plant to lift this capacity to one million tonnes per annum. The company operates its own 4 000 tonne

ship the M.V. Goliath to transport bulk cement to mainland markets. Goliath has also been exporting bagged palletised cement to Papua New Guinea and other Pacific Island destinations since 1970.

Humes Ltd (Statewide): The Company operates three divisions in Tasmania: Humes Concrete, producing pre cast concrete; Humes Plastics, manufacturing UPVC and high density polythene pipes and fittings for a wide range of uses; and Humes—ARC, producing prefabricated reinforcement mesh and rod. Steel Mains Pty Ltd, a subsidiary company manufactures water, steam and oil lines up to six metres in diameter. This company also produces pressure vessels, spheres, bulk storage tanks etc. A field crew operates throughout the State installing all types of structural steel, pipelines and mechanical items. A subsidiary company, Tita Fittings Pty Ltd manufactures brass fittings used in connection of polyethylene pipes.

National Textiles Ltd (Devonport): Previously Tootal Australia Pty Ltd, established 1952, manufacturers of woven man-made fibre fabrics in polyester/cotton and polyester/viscose blends for the workwear and fashion dress goods markets. Product rationalisation is currently taking place and the main production lines will be piece-dyed and yarn-dyed towels. The company is also active in the commission dyeing area, processing fabric mainly constructed of synthetic yarns or blends. The company manufactures in Devonport, and at Rutherford and Kotara in New South Wales. Australia-wide distribution is through its own selling offices located in all capital cities.

Repco Bearing Co. (Launceston): In 1949 this company was established to manufacture engine bearings for the Australian spare parts trade. The factory has since expanded and diversified its range of products and is now the only automotive bearing manufacturing company in Australia. The Company also undertakes the manufacture of sintered products using powder metallurgy techniques.

Sheridan Textiles (Derwent Park): Formerly known as UTA Hobart, then Sheridan Domestic Textiles. It is part of the Clothing, Footwear and Textile Group of Dunlop Olympic Ltd. The Derwent Park mill commenced operations as Silk & Textile Printers Pty Ltd in 1948. Production now involves the preparation, dyeing and printing of mainly polyester/cotton percale bed sheeting along with some commission printing. The mill also manufactures a full range of quality made-up domestic bed linen and shower curtains for Australian and export distribution.

Stanley Works Pty Ltd (Moonah); A Division of the Stanley Works Pty Ltd: Tasmania's only manufacturer of hand tools. A computerised manufacturing control system was commissioned as of December 1983 and will be further expanded in 1985. Two Commonwealth Research and Development Grants are assisting in further computerised control of manufacturing processes.

Tasmanian Electro-Metallurgical Co. Pty Ltd (Bell Bay): In 1962 BHP transferred its major alloy making from Newcastle to a green field site at Bell Bay. Expansion in 1976 gave export capacity and added ferro-silicon and manganese ore sinter to the existing product range of high carbon ferro-manganese and silico-manganese. Exports form a significant proportion of production and are being made to steelmakers and foundries in South East Asia, the Middle East, Japan, United States of America and New Zealand. Capacity is now about 150 000 tonnes per annum of ferro alloys and 250 000 tonnes per annum of manganese ore sinter. Due to a downturn in the world steel industry, operations during 1982 were reduced. Full plant operations resumed in January 1983. Approval has been given to upgrade facilities on site and this will mean that within three years manganese alloy capacity will increase by 33 per cent.

Tioxide Australia Pty Ltd (Burnie): This Company is a manufacturer of titanium pigments which are used as the base white pigment in paints, enamels, plastics, printing inks, rubber, paper, man-made fibres and a number of other products. At the present time, 10 different grades of pigment are made to meet the varying requirements of user industries. The Company was formed in 1937 as Australian Titan Products Pty Ltd. Plans for construction of the Heybridge plant were delayed by the Second World War and the factory was commissioned in December 1948. The initial annual output was 1 500 tonnes

compared with a current capacity of 32 000 tonnes. The Company commenced a \$6.5 million capital program of modernisation during 1982 in order to maintain its competitive position. Tioxide is the predominant supplier of titanium pigments to the Australian market and an increasingly significant supplier to SE Asian countries. A staff of approximately 365 was employed in mid-1984.

United Milk Tasmania Ltd (Smithton, Edith Creek, Wynyard, Devonport, Legerwood): This is the State's largest manufacturer of dairy products and processes approximately 70 per cent of the milk produced in the State. Annual production has recently reached approximately the following levels: butter (salted and unsalted), 5 500 tonnes; cheese (cheddar), 9 000 tonnes); milk powders (skim, full cream and buttermilk), 8 000 tonnes; whey powder, 500 tonnes; casein (acid), 500 tonnes; whey proteins (35 per cent, 50 per cent and 75 per cent), 750 tonnes. The Company also produces milk concentrates and operates retail produce/hardware stores and a farm machinery business servicing rural areas.

#### MANUFACTURING STATISTICS

#### Selected Articles Manufactured

The articles listed below do not include the following important Tasmanian products: aluminium, automotive engine bearings, cement, confectionery, ferro-manganese alloys, hand tools, hardboard, iron ore pellets, particle board, printing, writing and wrapping papers, starch, titanium dioxide, canned, dehydrated and quick frozen vegetables, woodpulp, woollen manufactures, and other textile products. Where there are only one or two producers or where one producer dominates, it is not possible to publish details for articles that would otherwise be included. Some articles, although important manufactures, such as cakes, pastry and pies, wooden furniture and joinery (excluding doors) are not included, as value details only are collected for such items.

The following table lists selected articles manufactured in Tasmania for recent years:

Selected Articles Manufactured: Quantities, Tasmania Article 1978-79 1979-80 1980-81 1981-82 1982-83 1983-84 Acid, sulphuric .....t 318 492 414 644 302 550 253 547 335 507 292 323 Aerated waters ......'000 1 n.p. 5 185 19 834 18 361 19 397 19 108 16 623 Apples, preserved (solid pack) .....t 4 740 3 922 4 941 4016 Bacon and ham .....t 2 457 2 094 2 3 7 5 2634 2 660 2519 Bricks, blocks, etc. .....'000 62 990 59 665 63 154 54 468 45 413 56 909 Butter (a) .....t 7 0 7 5 5 490 3 964 5 768 6 191 n.p. Cheese .....t 17 494 15 328 14 147 15 167 14 100 14 080 Concrete, ready mixed ......m<sup>3</sup> 260 367 250 021 249 715 226 702 187 642 208 185 Flour .....t 34 901 37 269 37 811 35 068 n.p. n.p. Paper, newsprint .....t 208 143 219 429 219 006 221 460 214 446 222 934 Superphosphate .....t 151 489 132 783 139 869 126 416 104 324 108 216 Timber-Sawn, peeled or sliced (b)— Hardwood .....'000 m3 298.3 289.2 287.6 255.6 r 183.1 217.9 Softwood .....'000 m<sup>3</sup> 31.3 67.6 75.6 71.7 r 64.9 63.7 Dressed-Floorboards .....'000 m3 28.1 51.2 14.8 17.4 10.0 n.v.a. Weatherboards .....'000 m<sup>3</sup> 0.4 1.7 n.p. n.p. 0.3 n.y.a. 92.1 Other ......'000 m<sup>3</sup> 65.6 116.1 47.5 57.3 n.y.a. Woodchips, etc. (greenweight) (c) ......'000 tonnes 2 9 7 8 3 673 3428 3 119 3 168 3 508 Zinc, refined .....t 204 623 191 683 188 471 193 714 185 482 187 399

(a) Includes butter equivalent of butter oil.

<sup>(</sup>b) Includes timber to be further processed.

<sup>(</sup>c) Defined in forestry section of Chapter 13.

# **Manufacturing Censuses**

Annual censuses of factories have been conducted from almost the start of the present century; the last 'old style' factory census covered the year 1967-68. For 1968-69 simultaneous integrated economic censuses were undertaken in respect of manufacturing and four other sectors (mining; wholesale trade; retail trade and electricity and gas production and distribution).

The 1968-69 integrated economic censuses were fully described in Appendix A of the 1972 Year Book in which there also appears an explanation of the factors which made necessary the termination of 'old style' factory censuses and the start of a new series, based on new reporting units and data concepts. In the following section, the results of the manufacturing census for 1982-83 are given.

Definitions and data concepts applying to the integrated economic censuses will be found in the section 'Economic Censuses and Surveys' in Chapter 19 of this edition. Also, results from manufacturing censuses are compared with those from integrated economic censuses covering other industry sectors in that section.

#### Census Results

# Manufacturing Establishments Classified According to Industry

The table that follows contains a summary of the principal manufacturing statistics by industry sub-division. Single establishment enterprises employing less than four employees at 30 June 1983 are excluded from this table:

# Manufacturing Establishments: Operations by Industry Sub-division, Tasmania 1982-83

Industry sub-division		Estab-		Employmer	ıt		
ASIC code (a)	Description	lish- ments operat- ing at 30 June	Males	Females	Persons	Wages and salaries	Turn- over
		no.	no.	no.	no.	\$'000	\$'000
21	Food, beverages and tobacco	118	3 930	1 977	5 907	80 032	592 068
- 23	Textiles	11	n.p.	n.p.	n.p.	n.p.	n.p.
24	Clothing and footwear	6	93	117	210	2 537	8 381
25	Wood, wood products and						
	furniture	121	2 748	204	2 952	44 849	236 398
26 27	Paper, paper products; printing and publishing	47	4 368	688	5 056	94 725	379 077
	products	15	n.p.	n.p.	n.p.	n.p.	n.p.
28	Non-metallic mineral products	44	717	54	771	13 710	78 602
29	Basic metal products	11	n.p.	n.p.	n.p.	n.p.	n.p.
31	Fabricated metal products	75	1 248	175	1 423	19 581	74 786
32	Transport equipment	18	540	115	655	11 030	32 376
33	Other machinery and equipment	35	613	91	704	11 448	30 237
34	Miscellaneous manufacturing	27	346	63	409	5 919	23 547
	Total manufacturing	528	19 597	4 488	24 085	387 714	1 968 504

Manufacturing Establishments: Operations	s by Industry Sub-division, Tasmania 1982-83 $-co$	ntinued
--	--	---------

	Industry sub-division	Sto	ocks	Purch-		Rent,	Fixed
ASIC code (a)	Description	Opening	Closing	ases, transfers in and selected expenses	Value added	leasing, and hiring expenses (b)	capital expen- diture
	· · · · · · · · · · · · · · · · · · ·	\$,000	\$'000	\$,000	\$'000	\$'000	\$'000
21	Food, beverages and tobacco	59 892	72 286	441 361	163 099	5 163	11 888
23	Textiles	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
24	Clothing and footwear	671	705	4 430	3 985	112	100
25	Wood, wood products and furniture	49 760	45 899	146 471	86 066	2 212	2 139
26 27	Paper, paper products; printing and publishing	45 268	41 326	210 913	164 222	3 848	8 181
	products	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
28	Non-metallic mineral products	11 902	14 239	47 470	33 469	500	1 732
29	Basic metal products	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
31	Fabricated metal products	12 944	12 379	43 732	30 489	1 468	3 109
32	Transport equipment	16 211	17 249	14 057	19 537	286	1 621
33	Other machinery and equipment	4 560	4 265	14 507	15 435	497	645
34	Miscellaneous manufacturing	3 401	3 451	12 161	11 435	369	287
	Total manufacturing	341 969	329 035	1 260 435	695 135	19 057	45 035

<sup>(</sup>a) Australian Standard Industrial Classification code.

# Manufacturing by Statistical Division

The next table shows, as a time series, the chief measures of manufacturing operations by statistical divisions:

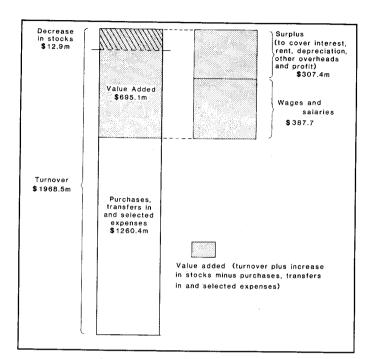
Manufacturing Establishments: Main Items by Statistical Division (a)

Materia	***	Year					
Main items	Unit	ended June	Hobart and Southern	Northern	Mersey- Lyell	Tasmania	
Number of establishments.	no.	1981 1982 1983	226 218 204	195 201 188	137 136 136	558 555 528	
Employment(b)—		1703	204	100	. 130	320	
Males	no.	1981 1982	8 446 8 227	7 093 6 870	6 403	21 942	
		1983	7 612	6 332	6 248 5 653	21 354 19 597	
Females	no.	1981	1 751	1 464	1 371	4 586	
		1982 1983	1 680 1 709	1 382 1 440	1 402 1 339	4 464 4 488	
Persons	no.	1981 1982	10 197 9 907	8 557 8 252	7 774 7 650	26 528 25 809	
		1983	9 321	7 772	6 992	24 085	
Wages and salaries	\$'000	1981	127 541	112 622	106 388	346 551	
		1982	136 216	119 264	114 687	370 167	
V-1 44 1	***	1983	141 260	122 219	124 235	387 714	
Value added	\$'000	1981	232 627	257 497	223 320	713 445	
		1982	251 172	246 693	215 226	713 091	
Elizaberatus de	01000	1983	264 492	204 089	226 554	695 135	
Fixed capital expenditure	\$'000	1981	23 275	18 312	18 620	60 208	
		1982 1983	15 513 14 615	32 461 12 479	36 443 17 940	84 417 45 035	

<sup>(</sup>a) Excludes details for single establishment enterprises employing less than four persons at 30 June.

<sup>(</sup>b) Outlay on fixed tangible assets less disposals.

<sup>(</sup>b) Includes working proprietors; figures are average over whole year.



#### Manufacturing Establishments, Value Added, Tasmania, 1982-83

#### Tasmania in Comparison with Other Australian States

A comparison of Tasmanian manufacturing activity with that of the other Australian States and territories is shown in the following table. Applying the appropriate population relativity factors to the figures, it will be seen that, on the basis of the resulting values, Tasmania is relatively more industrialised than Queensland, Western Australia, the Northern Territory and the Australian Capital Territory and approaches the level of South Australia.

	i asmania-Australia	Comparison of	Manuracturing	Activity,	1704-03
-		· · · · · · · · · · · · · · · · · · ·	***************************************		
	Dom. In				

State or territory	relativity lish	Estab-	ish- and	Turn- over (b)	Stocks		Pur- chases,	Value
		lish- ments			Opening	Closing	e1c. (c)	added
			Actual	' Value				
<u> </u>		no.	\$m	\$m	\$m	\$m	\$m	\$m
NSW	12.4	10 471	6 638	29 024	4 978	4 807	17 520	11 332
Vic	9.3	8 932	5 950	27 747	4 480	4 442	17 060	10 650
Qld	5.7	3 440	1 786	10 716	1 297	1 420	7 393	3 445
ŴA		2 499	1 038	5 597	738	756	3 574	2 041
SA		2 099	1 502	6 707	1 129	1 171	4 041	2 709
Tasmania	1.0	528	388	1 969	342	329	1 260	695
NT	0.3	117	45	344	83	81	251	91
ACT		150	55	218	48	52	126	97
Total Australia	35.5	27 696	17 403	82 321	13 094	13 059	51 226	31 059

continued next page

Tasmania-Australia Comparison of Manufacturing Activity, 1982-83-continued

State or	Popula- tion relativity (a)	Estab- lish- ments	Wages and salaries	Turn- over (b)	Stocks		Pur- chases,	Value
territory					Opening	Closing	etc. (c)	added
		Value	s Relative	to Popula	tion (d)			
NSW	12.4	844	535	2 341	401	388	1 413	914
Vic	9.3	902	640	2 984	482	478	1 834	1 145
Qld	5.7	604	313	1 880	228	249	1 297	604
ŴA	3.1	806	335	1 805	238	244	1 153	658
SA	3.1	677	485	2 164	364	378	1 304	874
Tasmania		528	388	1 969	342	329	1 260	695
NT	0.3	390	150	1 147	277	270	837	303
ACT	0.5	300	110	436	96	104	252	194
Total Australia	35.5	780	490	2 319	369	368	1 443	875

- (a) Tasmania's total mean population for 1982-83 is expressed as 1.0; other State populations in proportion to 1.0.
- (b) Sales, transfers out and other operating revenue.
- (c) Purchases, transfers in and selected expenses.
- (d) Figures are calculated by dividing the actual figures by the appropriate population relativity factor. They do not represent direct per head of population details but merely a comparison of the degree of manufacturing activity in each State relative to population.

#### Tasmania-Australia Comparison

In 1982-83 the Tasmanian share of Australian employment in manufacturing was 2.29 per cent; and of Australian 'value added' in manufacturing, 2.24 per cent. (Tasmanian's mean population as a proportion of Australia's for 1982-83 was 2.82 per cent.)

#### **Further References**

ABS Publications Produced by the Tasmanian Office:

Census of Manufacturing Establishments, Summary of Operations by Industry Class, Tasmania (8201.6),

Census of Manufacturing Establishments, Details of Operations and Small Area Statistics, Tasmania (8202.6), annual.

#### ABS Publications Produced by Central Office, Canberra:

Census of Manufacturing Establishments: Summary of Operations by Industry Sub-division, (Preliminary) Australia (8201.0), annual.

Manufacturing Establishments: Summary of Operations by Industry Class, Australia (8202.0), annual. Manufacturing Commodities: Principal Materials Used, Australia (8210.0), irregular.

Production Statistics, Australia (Preliminary) (8301.0), monthly.

Manufacturing Commodities: Principal Articles Produced, Australia (8303.0), annual.

Production Bulletins (monthly), Australia-

No. 1: Electrical Appliances (8357.0).

No. 2: Clothing and Footwear (8358.0).

No. 3: Food, Drink and Tobacco (8359.0).

No. 4: Textiles, Bedding and Floor Coverings (8360.0).

No. 5: Building Materials and Fittings (8361.0).

No. 6: Chemicals and By-Products (8362.0).

No. 7: Motor Vehicles, Parts and Accessories (8363.0).

No. 8: Miscellaneous Products (8364.0).

Manufacturing Commodities: Selected Principal Articles Produced, Australia (Preliminary) (8365.0), annual.

#### Other Publications:

DEPARTMENT OF INDUSTRIAL DEVELOPMENT. Tasmanian Manufacturers Directory (biennial, Tasmanian Government Printer, Hobart).

# **CHAPTER 15**

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# Chapter 15

# ENERGY, WATER SUPPLY AND SEWERAGE

#### **ENERGY IN TASMANIA**

In 1982-83 total energy consumption in Tasmania was almost 81 petajoules. Most was supplied by petroleum products (45%) and hydro-electricity (36%). Small amounts were derived from black coal (10%) and wood (8%). The manufacturing industry was the largest consumer of energy using 41 per cent, transport took 24 per cent (all in the form of petroleum products) and the residential sector used 15 per cent.

Net Energy Consumption, Tasmania (Petajoules) r Source: Department of Resources and Energy

Sector	1978-79	1979-80	1980-81	1981-82	1982-83
Industry (a)—					
Agriculture	1.4	1.5	2.0	1.8	1.9
Mining	4.4	4.4	4.3	4.1	4.3
Manufacturing—					
Food, beverages, tobacco.	2.2	2.4	2.2	2.2	2.1
Textiles etc	0.5	0.5	0.4	0.4	0.4
Wood, wood products	1.5	1.6	1.4	1.5	1.2
Paper, paper products	8.8	10.4	9.3	9.9	9.8
Chemicals, petroleum,					
coal	1.8	1.9	1.7	1.6	1.4
Non-metallic minerals	2.9	2.5	2.6	3.2	2.7
Basic metals	16.6	16.9	16.3	16.2	15.5
Other manufacturing	0.1	0.1	0.1	0.1	0.1
Total manufacturing	34.5	36.4	34.2	35.2	33.3
Electricity, gas and water	2.5	2.9	3.3	6.1	4.1
Construction	1.2	1.7	1.2	1.0	1.0
Wholesale/retail trade	1.9	1.9	1.9	2.0	1.9
Transport and storage—	1.,,	,			
Road transport	17.2	17.1	17.1	17.3	16.9
Rail, water,	17.2	17.11			
and air transport	3.2	3.6	3.2	2.6	2.3
Total transport	3.2	5.0	J. <b>2</b>		
and storage	20.4	20.7	20.4	19.9	19.1
Communications, finance	20.4	20.7	20.1	1,,,,	
and business services	0.3	0.3	0.3	0.3	0.3
Public administration	0.3	0.3	0.3	0.3	0.3
Community services	0.3	0.9	0.9	0.9	0.9
Entertainment and personal	0.0	0.7	0.7	0.5	0.5
services	0.4	0.4	0.5	0.5	0.5
Residential	12.1	11.7	11.6	11.8	11.8
Lubes, bitumen and solvents	1.3	1.2	1.1	1.1	1.2
Total	81.3	84.2	81.9	84.9	80.7

<sup>(</sup>a) By ASIC. See Australian Standard Industrial Classification, Volume 1. (1201.0), Australian Bureau of Statistics, Canberra.

#### Petroleum Products

All Tasmania's petroleum products are imported. In total energy terms nearly half is used for transportation. Tasmanian industry is heavily reliant on furnace oil which is particularly vulnerable to supply disruptions and price fluctuations as it is almost entirely imported from overseas. The table below shows consumption of petroleum products in Tasmania:

#### Consumption of Petroleum Products, Tasmania Source: Department of Resources and Energy (million litres)

Product	1978-79	1979-80	1980-81	1981-82	1982-83	1983-84
LPG	7	10	10	9	7	9
Aviation gasoline	4	3	3	3	2	3
Automotive gasoline—						-
Premium	370	365	367	377	368	381
Standard	58	56	49	41	36	34
Total	428	421	416	418	404	414
Aviation turbine fuel	35	41	35	35	35	33
Lighting kerosine	8	6	4	4	3	2
Heating oil	67	44	29	26	20	17
Power kerosine	_	_		_		
Automotive diesel oil—						
Inland	189	210	217	206	209	219
Bunkers	5	3	4	3	2	1
Total	193	213	220	209	211	220
Industrial and marine						
diesel fuel						
Inland	45	38	30	28	14	13
Bunkers	24	31	25	14	8	14
Total	69	70	56	42	22	27
Fuel oil—						
Inland	254	290	252	335	171	159
Bunkers	7	6	10	4	2	1
Total	261	296	262	339	173	161
Lubes	n.a.	n.a.	n.a.	11	10	10
Bitumen	n.a.	n.a.	n.a.	15	19	20
Other products n.e.i	n.a.	n.a.	n.a.	1	1	1
Total all products (a)	1 072	1 105	1 035	1 112	1 080	916

(a) Before 1980-81 does not include lubes, bitumen and other products n.e.i.

Australia imports about 25 per cent of its crude oil requirements. This significant level of dependence on imported oil has focused Commonwealth Government attention on possible problems this might cause in terms of continuing supply and price. The Government decided to price locally produced crude oil at world parity.

Pricing local supplies of oil at the value placed on them in world markets has the advantage of encouraging:

- conservation, by ensuring that energy consumers make decisions based on realistic prices;
- the substitution of petroleum products by other more readily available fuels:
- exploration and development of oil resources; and
- the development of alternative fuels.

The impact of this policy on Tasmania can be seen in the above table. Since 1978-79 there has been noticeable stabilisation or declines in the consumption of all petroleum products. Sales of automotive gasoline, the major petroleum fuel used in Tasmania, although beginning to rise again, are still three per cent less than in 1978-79. Reductions in the use of fuel oil via fuel substitution have been more difficult to achieve in Tasmania than in the rest of Australia due at least in part to the lack of access to natural gas and low cost coal resources. However the reduction is still substantial.

# **Hydro-Electricity**

The development of hydro-electric power has been important for the economic development of Tasmania. The first plant was opened in Launceston in 1895 at Duck Reach. Work on the statewide system did not begin until 1911 when the privately owned Hydro-Electric Power and Metallurgical Co. began work at Waddamana below Great Lake. The Company was purchased by the Government in 1914 and the Hydro-Electric Department was formed. An active policy was pursued to encourage high energy using industries to establish operations in Tasmania.

This policy was pursued in the hope of overcoming Tasmania's disadvantages of a small local market and transport problems. Zinc production began in 1916, fine paper production in 1938, aluminium smelting in 1955 and ferro-manganese production in 1962.

The HED became the Hydro-Electric Commission in 1930. Since Waddamana the hydro-electric system has expanded to 1.62 million kW. As well the HEC runs a thermal plant at Bell Bay with capacity of 240 000 kW.

Net Consumption of Electricity,	Tasmania (Petajoules) r
Source: Department of Re-	sources and Energy

Sector	1978-79	1979-80	1980-81	1981-82	1982-83
Industry (a)—					
Agriculture	0.1	0.1	0.2	0.2	0.2
Mining	1.8	1.8	1.8	1.8	1.8
Manufacturing—					
Food, beverages, tobacco.	n.a.	n.a.	n.a.	n.a.	n.a.
Textiles etc	0.1	0.1	0.1	0.1	0.1
Wood, wood products	0.3	0.4	0.4	0.4	0.4
Paper and paper products	n.a.	n.a.	n.a.	n.a.	n.a.
Chemicals, petrol, coal	n.a.	n.a.	n.a.	n.a.	n.a.
Non-metallic minerals	0.4	0.4	0.4	0.4	0.3
Basic metals	12.7	12.6	12.4	12.7	12.1
Other manufacturing		<del>-</del> -	_	0.1	0.1
Total manufacturing .	17.1	17.4	17.1	17.5	16.9
Electricity, gas, water	2.5	2.4	2.9	2.5	2.4
Construction			_	_	
Wholesale/retail trade	1.3	1.3	1.4	1.5	1.5
Transport and storage		_	_	_	<del>-</del>
Communications		_		0.1	0.1
Finance and business					
services	0.2	0.2	0.2	0.2	0.2
Public administration	0.2	0.2	0.2	0.2	0.2
Community services	n.a.	n.a.	n.a.	n.a.	n.a.
Entertainment and personal					
services	0.4	0.4	0.5	0.5	0.5
Residential	4.0	4.2	4.3	4.5	4.6
Total	28.0	28.6	29.1	29.4	28.8

<sup>(</sup>a) By ASIC. See Australian Standard Industrial Classification, Volume 1 (1201.0) Australian Bureau of Statistics, Canberra.

#### Organisation of HEC

The HEC is a statutory corporation and operates under the *Hydro-Electric Commission Act* 1944. Its responsibility is to generate, transmit, distribute and sell electrical energy. It also regulates safety standards for electrical installations and appliances. (See 1982 and previous *Year Books* for more details.)

# Hydro-Electric Commission, Tasmania, Integrated System: Operating Statistics (a) Source: Hydro-Electric Commission

	Outp	put		Peak loading		
Year	Units generated	Increase over previous year	Installed generating capacity (b)	Load	Increase over previous year	
	million kWh	per cent	kW	kW	per cent	
979	7 702	4.7	1 780 400	1 151 400	-0.7	
980	7 913	2.7	1 780 400	1 183 000	2.7	
981	8 003	1.1	1 780 400	1 241 100	4.9	
982	7 965	-0.5	1 860 300	1 266 100	2.0	
983	7 937	-0.4	1 940 200	1 297 100	2.5	

- (a) Excludes King and Flinders Islands.
- (b) At 31 December.

#### TASMANIAN ELECTRICITY GENERATING SYSTEM

#### Introduction

Until 1971 Tasmania was unique among Australian States in that its electric power system was based almost entirely on hydro-electric installations, but in 1971 a thermal oil-fired station commenced operations at Bell Bay opening a new phase in the development of the generating system. Other Australian States rely principally on thermal plants while hydro-electric power, if available, is used only to supplement the basic supply. The Snowy Mountains Hydro-Electric Scheme, which feeds power to the Victorian and NSW grids, is not designed to cope with the base load demand in these States, its essential function being to provide the extra power necessary to meet peak loads, and also to supply water for irrigation purposes. The Tasmanian system, despite its lower installed generator capacity, produces more energy than the Snowy Scheme. The total installed generator capacity of the Tasmanian electricity generating system at the end of 1983 was over 1.9 million kW. Of this, 88 per cent (over 1.5 million kW) was contributed by an integrated hydro-electric network. The 240 000 kW oil-fired station at Bell Bay is used to supply energy in excess of the capability of the hydro system and for system support in dry periods.

#### Tarraleah

This scheme was commenced in 1934 and completed in 1951. Lake St Clair was raised and Lake King William was created. Total capacity stands at 102 200 kW.

# Tungatinah — Lake Echo

Uses the run-off from the area between Great Lake and Lake St Clair, Lake Echo being the major catchment. The scheme, completed in 1956, has a total capacity of 157 400 kW.

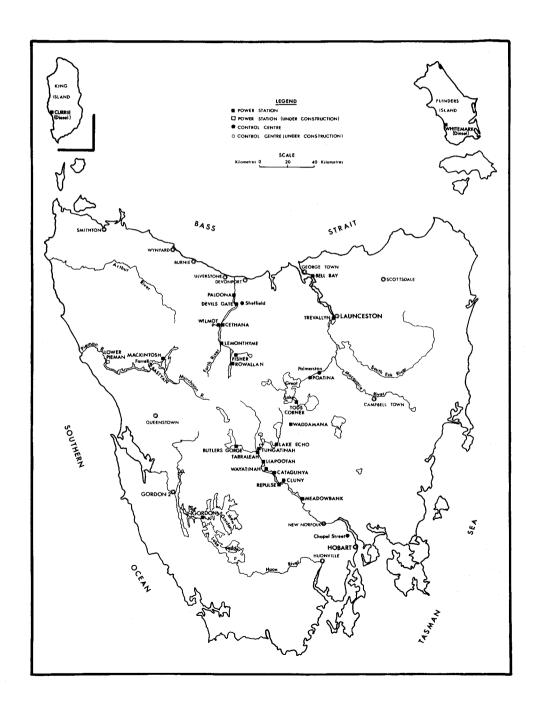
# Upper Derwent

The Upper Derwent Development consists of three schemes — Liapootah, Wayatinah and Catagunya. The water used in these schemes has previously been used for power generation. Total capacity of these schemes is 169 950 kW.

#### Lower Derwent

The three stations in this development were built between 1961 and 1968 and exploit the remaining 125 m fall to sea level of the Derwent River. Total capacity of the scheme is 85 000 kW.

# **Tasmanian Generating System**



# Great Lake — South Esk

Poatina station (300 000 kW) is the largest station in the Tasmanian Hydro-Electric system. The station uses the waters of the Great Lake which have been diverted into the South Esk River. Trevallyn station fed by the South Esk brings the scheme's installed capacity to 380 000 kW.

## Bell Bay

Began operation in 1971 as the only non-hydro power station in the State grid. Total capacity now is 240 000 kW.

## Mersey-Forth

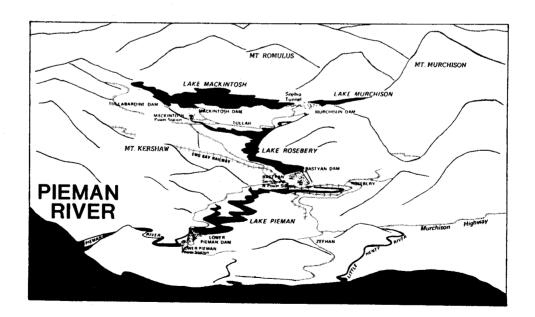
This scheme, completed in 1973, exploits the flows of the Fisher, Mersey, Wilmot and Forth rivers by a development comprising seven power stations, seven large dams, three major tunnels and associated works. Total capacity is 308 250 kW.

#### Gordon River

Uses the waters stored in two new lakes created for the scheme — Lake Pedder and Lake Gordon. These lakes form the largest fresh water storage in Australia. The Gordon power station currently has a generating capacity of 288 000 kW; and provision has been made in the station for the installation of three more machines to bring the total installed capacity to 720 000 kW. Initial work has been started on the installation of the first of these additional three machines.

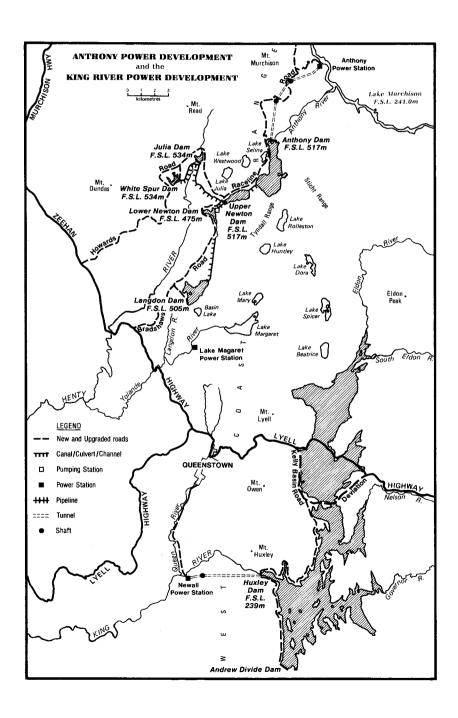
#### Pieman River

This scheme when completed will use the waters of the Pieman River system. Four lakes will be created to service three power stations. The Mackintosh power station of 79 900 kW was commissioned in 1982 and Bastyan power station, also 79 900 kW, the following year. When completed in 1986 the total capacity will be 418 500 kW.



# King River and Anthony Power Developments

Legislation enabling construction of these two new hydro power schemes, based on western Tasmanian rivers, was approved by the State Parliament during 1983 and work began almost immediately. They will together add more than 230 000 kW to the installed capacity of the system.



Stations	Year of first generator commission	Static head (metres)	Generator capacity (kW)	Energy produced (mWh)
	Completed Stations as	at 30 June 1984	·	1983-84
Tarraleah	1938	299	90 000	542 111
Waddamana 'B' (a)	1944	344	48 000	5 041
Butlers Gorge	1951	56	12 200	58 870
King Island	1951	(b)	1 444	5 558
Tungatinah	1953	306	125 000	490 893
Trevallyn	1955	126	80 000	444 408
Lake Echo	1956	173	32 400	89 263
Wayatinah	1957	62	38 250	236 285
Liapootah	1960	110	83 700	399 773
Catagunya	1962	43	48 000	213 634
Poatina	1964	829	300 000	1 048 829
Tods Corner	1966	41	1 600	724
Meadowbank	1967	29	40 000	159 008
Cluny	1968	16	17 000	81 164
Repulse	1968	27	28 000	135 130
Rowallan	1968	49	10 450	33 305
Flinders Island	1968	(b)	400	1 144
Lemonthyme	1969	159	51 000	291 261
Devils Gate	1969	68	60 000	286 453
Wilmot	1971	251	30 600	132 569
Bell Bay (Thermal)	1971	(c)	240 000	398 084
Cethana `	1971	99	85 000	396 423
Paloona	1972	31	28 000	128 276
Fisher	1973	649	43 200	256 296
Gordon (Stage 1)	1978	200	288 000	1 668 735
Mackintosh	1982	r 70	79 900	301 361
Bastyan	1983	r 65	79 900	260 541
Total	••		1 942 044	
	Stations Under	r Construction		
Reece (formerly Pieman)	1986	94	231 000	
King	1991	195	142 000	
Anthony	1992	285	94 000	

<sup>(</sup>a) Reserve plant only.

### WATER SUPPLY AND SEWERAGE

# Water and Sewerage Connections

The following table shows the number of properties in each local government area which are connected to water and sewerage schemes.

Details are those reported by local government authorities for schemes which are their responsibility (e.g. some mining towns are excluded) and relate broadly to the number of properties, whether residential or not, connected to mains. A uniform definition of a property connected has not, however, been used by all authorities (e.g. differences can occur where several properties are served by one connection or conversely where there are several connections to one property). Care should therefore be used in comparing details for different local government areas.

<sup>(</sup>b) Diesel generators.

<sup>(</sup>c) Thermal oil-fired station; the second generator was installed in 1974.

Number of Properties in each Local Government Area Connected to Water and Sewerage Schemes at 30 June 1984

Municipality	Water	Sewerage		
Beaconsfield	4 505	3 348		
Bothwell	148	_		
Brighton	2 384	2 611		
Bruny	_			
Burnie	6 001	6 692		
Campbell Town	398	337		
Circular Head	1 570	893		
Clarence	13 487	12 067		
Deloraine	922	680		
	8 450	8 750		
Devonport		217		
Esperence	1 055	771		
ivandale	666	294		
ingal	983	_		
linders	196			
Jeorge Town	2 269	1 874		
Glamorgan	990	357		
Glenorchy	13 736	13 783		
Gormanston	66			
Green Ponds	191	165		
Hamilton	185			
Hobart	18 686	18 125		
Huon	1 080	270		
Kentish	686	606		
King Island	355	346		
Kingborough	5 444	4 189		
Latrobe	1 513	1 284		
Launceston	15 285	15 346		
ilydale	2 748	2 279		
Longford	1 600	1 280		
New Norfolk	2 202	1 919		
Datlands	254	230		
	1 349	997		
Penguin		291		
Port Cygnet	459			
Portland	1 248	502		
Queenstown	1 273	1 271		
Richmond	446	320		
Ringarooma	569	_		
Ross	158	86		
St Leonards	6 719	6 622		
Scottsdale	1 781	1 462		
Sorell	1 027	1 080		
Spring Bay	733	269		
Strahan	261	5		
asman	-	_		
Jlverstone	4 060	3 968		
Waratah	· · · · · · · · · · · · · · · · · · ·			
Vestbury	1 623	1 247		
Vynyard	2 850	2 637		
Zeehan	1 333	1 172		
Tasmania	133 944	119 871		

# **Hobart Regional Water Board**

The Hobart Regional Water Board was constituted as from 1 July 1984, as the successor to the previous Metropolitan Water Board.

The new Board has overall control of the supply of bulk water to the local government areas of Hobart, Glenorchy, Clarence, Kingborough, Sorell, Richmond, Green Ponds, New Norfolk and Brighton; while the local government authorities are responsible for reticulation to consumers and rating.

The Board has a large pumping station and treatment plant at Bryn Estyn on the Derwent River above New Norfolk and water is supplied from the plant to Hobart's western shore via the West Derwent Pipeline and to the eastern shore municipalities by the Southern Regional Water Supply Scheme. The capacity of these pipelines are 136 megalitres and 27 megalitres per day respectively and constitute the main source of supply available to the Board.

During 1981-82 the Metropolitan Water Board commenced a major augmentation of the West Derwent Pipeline and Bryn Estyn plant which was completed in 1984 at a cost of \$23.7 million.

The Board also directs the operation of bulk supply works managed by the municipalities. These include the Lake Fenton Pipeline and Mount Wellington storages in the Hobart and Glenorchy municipalities.

Since its inception in 1962 the Metropolitan Water Board has extended its services to the towns of Cambridge, Midway Point, Sorell, Seven Mile Beach, Lauderdale and Rokeby on the eastern shore, while on the western shore extensions serve Margate, Snug and Howden.

# Financial Relationship

Under the Metropolitan Water Board Act 1961 the four metropolitan local government authorities no longer borrowed money for metropolitan water works, but were provided with the necessary capital by the Board. The Board obtained its funds from private lenders and the State Loan Fund, the local authorities in turn being required to make revenue contributions to the Board. The effect of this arrangement can be seen in State local government loan debt tables where the debt in respect of water shows only very minor annual increases; in effect, the expenditure of the four metropolitan local government authorities for water works undertaken since 1961 was reflected in the debt of the Board and not in debts of the municipalities. At 30 June 1984 the loan debt of the Board to the State Treasury was \$16.6 million and to other lenders \$38.9 million.

The financial relationship between the Metropolitan Water Board and the four metropolitan local government authorities is summarised in the following table:

Metropolitan Water Board: Income and Expenditure (\$2000)

Particulars	1979-80	1980-81	1981-82	1982-83	1983-84
Inco	me				
Municipal contributions—					
Hobart	2 924	3 231	3 690	4 214	5 006
Glenorchy	1 398	1 635	1 807	1 996	2 366
Clarence	1 375	1 372	1 448	1 606	1 895
Kingborough	351	431	491	588	679
Special consumers	592	565	693	759	892
Rural areas	914	839	993	1 175	1 136
Other revenue	770	1 408	1 558	1 549	2 294
Total	8 324	9 481	10 680	11 887	14 268
Expend	diture				
Reimbursement of working expenses—					
Hobart	1 234	1 424	1 585	1 806	1 888
Glenorchy	553	638	673	819	886
Clarence	420	458	509	563	573
Kingborough	193	227	246	269	268
Bulk supply, operation costs	1 509	1 629	1 836	2 367	2 491
Administrative expenses	255	355	394	424	483
nterest	2 707	3 217	3 437	4 135	5 651
Depreciation	806	918	1 001	1 117	1 296
Superannuation	181	209	244	289	329
Other		_		4	17
······································					

The preceding table excludes capital contributions. These are shown in the next table:

Metropolitan Water Board: Capital Contributions to Southern Local Government Authorities (\$'000)

Particulars	1978-79	1979-80	1980-81	1981-82	1982-83	1983-84
Hobart— Construction and improvement Loan redemption and conversion	772 33	481 35	624 31	325 32	417 16	430 18
Total	805	516	655	357	433	448
Glenorchy— Construction and improvement Loan redemption and conversion	177 40	299 r42	148 43	481 37	271 31	433 15
Total	217	341	191	518	302	448
Clarence— Construction and improvement Loan redemption and conversion	140 50 190	161 47 208	181 46 227	272 43 315	769 34 803	179 28 207
Kingborough— Construction and improvement Loan redemption and conversion  Total	195 17 212	527 6 533	218 8 226	64 5	184 5	137 6
Total— Construction and improvement Loan redemption and conversion	1 284 140	1 468 131	1 171 128	1 142 117	1 641 86	1 179 67
Grand total	1 424	1 599	1 299	1 259	1 727	1 246

The Board made capital contributions to the four local government authorities for: construction and improvement of their water works; and redemption of their water debt raised prior to creation of the Board. The Board financed these capital contributions by: borrowing from the State Government; raising private loans; and application of internal funds, e.g. depreciation funds. The cost of servicing loans, raised by the Board to meet local government requirements, was met from revenue contributions by the four local government authorities.

The Hobart Regional Water Board will only be responsible for costs associated with the bulk water supply, and the local government authorities will be responsible for the working expenses and capital costs in respect of their reticulation systems. The Board will recover its bulk water costs by charging the municipalities a unit rate for water actually supplied.

# Capital Expenditure

The major item of expenditure by the Metropolitan Water Board in 1983-84 was \$6 430 997 for the augmentation of the West Derwent Scheme. Expenditure on other projects, including municipal reticulation works, was \$1 657 557. The works program was financed from borrowings carried over from the previous year together with \$11 million from loans raised in 1983-84.

#### North-West Regional Water Authority

This Authority was constituted under the provisions of the North-West Regional Water Act 1976 and is vested with the control and management of the water supply undertaking within the North-West Regional Water District.

Since 1 July 1977 all works associated with the storage and distribution of water by the local government authorities of Circular Head, Devonport, Kentish, Latrobe, Penguin, Ulverstone and Wynyard in the constituent water districts have been transferred to and vested in the Authority. The Municipality of Burnie is not included in the water district.

The financial relationship between the Authority and the seven local authorities is summarised in the following tables:

North-West Regional Water Authority: Income and Expenditure (\$'000)

Particulars	1981-82	1982-83	1983-84
Incom	е		
Municipal contributions—			
Devonport	2 219	2 883	3 221
Ulverstone	863	1 114	1 259
Wynyard	630	807	895
Latrobe	301	433	496
Circular Head	326	412	458
Kentish	140	180	203
Penguin	222	306	370
Interest	151	401	632
Contribution to loan interest and expenses (a)	266	(a)189	319
Other receipts	8	7	10
Total	5 125	6 732	7 863
Expendi	ture		
Reimbursement of working expenses—			
Devonport	733	873	856
Ulverstone	257	280	280
Wynyard	165	175	164
Latrobe	. 117	104	128
Circular Head	149	185	195
Kentish	38	39	42
Penguin	61	65	86
Operating expenses	819	1 065	1 041
Administration expenses	r153	<i>r</i> 166	161
Interest	2 090	2 822	3 695
Depreciation	182	260	309
F	***************************************		

<sup>(</sup>a) The Authority has submitted a claim to the Treasury for \$318 953 for reimbursement of additional interest and borrowing charges which it incurred to 30 June 1984 as a result of certain external borrowings.

North-West Regional Water Authority: Capital Contribution to North-West Local Government Authorities (\$'000)

Particulars	1981-82	1982-83	1983-84
Devonport—  Construction and improvement  Loan redemption and conversion	185	235	229
Total	185	235	229
Ulverstone—  Construction and improvement  Loan redemption and conversion	75 —	73 —	124
Total	75	73	124
Wynyard—  Construction and improvement  Loan redemption and conversion	54	225	202 —
Total	54	225	202
Latrobe—  Construction and improvement  Loan redemption and conversion	99 121	100	123
Total	220	100	123
Circular Head— Construction and improvement Loan redemption and conversion	29	98 —	120
Total	29	98	120
Kentish—  Construction and improvement  Loan redemption and conversion	<u>15</u>	24 —	111 —
Total	15	24	111
Penguin—  Construction and improvement  Loan redemption and conversion	20 —	24 —	77
Total	20	24	77
Total— Construction and improvement Loan redemption and conversion	477 121	779 —	986 —
Grand Total	598	779	986

Funds raised by the Authority for capital purposes in 1983-84 totalled \$4 600 000, all of which was raised by local external borrowings.

The main items of capital expenditure during 1983-84 were \$1 997 020 for construction of the Smithton Treatment Plant (not yet completed), \$241 381 for the Smithton Reservoir, \$282 130 for the Stanley Reservoir, \$1 616 449 for construction of the Penguin Treatment Plant (not yet completed), \$238 166 for the Turners Beach Reserve, \$308 013 for the Devonport Reservoir, \$173 258 for trunk main extension to supply Wesley Vale (not yet completed), and \$106 855 for trunk main to connect Sulphur Creek and

Heybridge to Penguin Supply (not yet completed). Total capital expenditure for 1983-84 was \$6 227 542.

#### **Rivers and Water Supply Commission**

Introduction

The Commission was established by the *Water Act* 1957 which came into operation by proclamation on 1 September 1958.

The Water Act 1957 provides for the best use of the natural waters of the State and, to that end, to establish an authority to initiate and control the use of those waters, to codify the statute law affecting their use, to provide for the establishment of local river and water supply authorities, to repeal the Water, Sewerage and Drainage Board Act 1944 and to repeal or amend other Acts.

Municipal Water, Sewerage and Drainage Works

The Commission examines all proposed municipal water supply schemes before construction commences to ensure that the schemes are economically sound. (Schemes proposed by the cities of Hobart, Launceston, Glenorchy and Devonport are exempt from examination by the Commission.)

A total of 88 municipal proposals were approved by the Commission in 1983-84 for a total value of \$9 619 000.

Financial Assistance to Municipalities

Two major changes to the legislation were made in 1984-85. In the past, subsidies were provided under a number of separate Acts to assist municipalities in meeting the costs of operating their water supply and sewerage schemes and the rules determining the assessment of a subsidy varied slightly from Act to Act. This has been altered so that subsidies are now authorised under the one Act (Water Act, Section 40) and the rules have been consolidated.

At the same time, the Commission's role in receiving, assessing and recommending the amount of any subsidy was varied so that application is now first made to the Minister (not the Commission). The Commission shall provide the Minister with such information and recommendation as he may request and the Minister may direct the Commission to carry out such investigations and to make recommendations to him on such questions, as he may determine.

The effect of this change is that where in the past the Minister could only approve of a subsidy that had been recommended by the Commission, he can now vary the amount if he so wishes.

If the Commission is requested by the Minister to assess a subsidy application, anticipated charges of a scheme are considered and these are compared with the revenue likely to be derived from the district to be served. The Commission assesses revenue in accordance with an agreed standard.

#### Regional Schemes

North Esk Regional Water Supply: Under the provisions of the North Esk Regional Water Act 1960, the Commission has responsibilities for the supply of bulk water to the municipalities of St Leonards, Lilydale and George Town, together with Prospect Vale and Hadspen in the Westbury municipality and White Hills in the Evandale municipality.

The Commission also supplies water to industries in Bell Bay and a number of wayside consumers outside the larger population centres.

The main source of supply for the scheme is the North Esk River at Watery Plains where up to 30 megalitres per day can be diverted into the scheme. This flows through a gravity pipeline to Chimney Saddle Water Treatment Plant where treatment includes chemical addition, flocculation, settlement filtration, pH correction and fluoridation.

Treated water is stored in the 300 megalitre dam adjacent to the works. Water is drawn from this dam, chlorinated and distributed in bulk to St Leonards and other municipalities via a 65 kilometre trunk pipeline to George Town.

There are several service reservoirs at strategic points along this pipeline and a pump station at Doctors Hill lifts water to a suitable level to serve Bell Bay and George Town.

In addition to the above source of supply, the Commission pumps water from the South Esk at Hadspen to augment the supply to Prospect Vale and Hadspen. The capacity of this pump station is 4.5 megalitres per day and there is a 2.5 megalitres per day water treatment plant adjacent to the pump station.

This is further augmented at the northern part of the scheme by a 12 000 megalitre capacity dam and pump station on the Curries River. The pumps at present installed in the pump station can deliver 22 megalitres per day to Bell Bay via an eight kilometre long pipeline. Water from Curries River can be delivered either to Bell Bay industries for commercial purposes without treatment other than settlement in the dam or after treatment in the Bell Bay plant into the bulk water supply system.

The total water supplied during 1983-84 was 7 896 megalitres. The total capital cost of the scheme at 30 June 1984, amounted to \$14 198 400.

West Tamar Water Supply: Under the provisions of the West Tamar Water Act 1960, the West Tamar Water Supply Scheme is vested in the Rivers and Water Supply Commission. The operation and maintenance of the scheme is carried out by the Beaconsfield Council as agent for the Commission.

The scheme supplies fully treated water to all developed areas in the Beaconsfield municipality from Riverside in the south to Ilfraville in the north.

The source of supply for the scheme is Trevallyn dam by arrangement with the Hydro-Electric Commission.

The scheme has an output capacity of 20.5 megalitres of treated water per day to a total of almost 5 200 connections, most of which are residential.

The total water consumption during 1983-84 was 2 604.7 megalitres. Total capital expenditure on the scheme at 30 June 1984, amounted to \$3 367 123.

Prosser River Water Supply: In 1963-64 the Commission constructed the Prosser River Scheme for the prime purpose of providing water for an alginate industry at Louisville. It also arranged to supply the town of Orford with fully treated water.

In 1969-70 the Commission received a request for water from the woodchip industry on the northern shore of Spring Bay. This involved an underwater pipeline across Spring Bay. Since that time the pipeline has supplied a fishmeal industry and several other minor consumers.

The alginate industry closed down in 1973 and this complex was later developed as a tourist resort. The fishmeal industry closed down in 1974, but was later taken over by a fish processing firm.

In more recent years the Orford supply has been extended to serve Shelley Beach and Barton Avenue on the southern side of Spring Bay has received a supply from the main supplying Louisville.

Investigations are in hand to extend the Orford scheme further to the resort at Spring Beach.

The total volume of water produced by the scheme during 1983-84 was 255 megalitres. Total capital expenditure on the scheme at 30 June 1984 amounted to \$467.764.

#### Irrigation Schemes

Cressy-Longford Irrigation Scheme: The scheme is administered and operated by the Rivers and Water Supply Commission. It is the State's first major irrigation system,

being officially opened in 1974. Situated some 30 km south of Launceston between Cressy and Longford, the Irrigation District covers about 10 000 hectares of some of the oldest and most intensively farmed areas in the State.

The source of supply is the tail-race of the Poatina Power Station. Water is supplied under gravity to each farm in the constituted Irrigation District through an earthen channel system, some 94 km in length.

In 1977, following requests from landholders in the area, the scheme was extended to supply an additional nine properties around Toiberry by pumping from the North Channel. Water is delivered into individual farmer's holding dams from which they draw their requirements either by pumping or gravity at rates suitable to their particular needs.

Water from the scheme can also be discharged into the Liffey River below Bracknell and at least another 20 riparian holdings within this district can be supplied.

Each piece of land within the Irrigation District, and those properties which can be supplied within the Liffey River Augmented Flow District, are given an 'Irrigation Right' which is an annual entitlement to a certain quantity of water.

The volume of water delivered to landowners (including those on the Liffey River) in 1983-84 amounted to 5 427 megalitres.

The capital cost of the scheme to 30 June 1984 amounted to \$1 387 700 of which the Commonwealth provided \$750 000 in the form of a non-repayable, non-interest bearing loan.

Togari Water Supply: This scheme was constructed and administered by the Closer Settlement Board up to May 1974 at which time authority to administer the scheme was vested in the Commission.

The scheme supplies water mainly for stock and washing down dairies at Togari about 30 km south-west of Smithton.

The total quantity of water used in 1983-84 was 87.6 megalitres. The total capital cost of the scheme at 30 June 1984 is approximately \$74.767.

River Improvement and Drainage Works

Montagu Catchment River Improvement District: The River Improvement District was proclaimed in 1978, and covers the entire catchment of the Montagu River. Main works carried out during the year were the continuing weed spraying program for a distance of 16 km, including Fosters Creek. Works were also undertaken to widen the river and remove trees for some 2 km at the top end of the Montagu River near Roger River West. A watercourse, into which empties a drain from the Togari Drainage Area, was improved for a distance of 2 km starting from the Barcoo Road.

The total capital cost incurred at 30 June 1984, amounted to \$930.

Furneaux Drainage Area — Flinders Island: Flinders Island, the largest of the Furneaux Group and also the largest of the Bass Strait Islands, has an area of 1 333 square km. Mean annual rainfall for the whole Island is approximately 800 mm.

Perhaps the most distinctive topographic feature on Flinders Island is a central granite spine running north-west to south-east along the Island, separating a narrow western and a broad eastern coastal plain.

The western side of the Island is steeper than the eastern part, with a better developed stream pattern and hence has less need for extensive artificial drainage systems.

Broadly speaking, there are four main drainage areas on the Island: the Wingaroo area in the north east, largely undeveloped, the Furneaux Estate forming the major part of the War Service Land Settlement development on the Island, and the older established areas of Boot Jack in the south-east and Happy Valley, Whitemark, in the south-west.

Although the drainage works have been grouped into four main areas, not one of these areas has one common outfall. The most extensive of these areas, the Furneaux Estate

has five separate outfalls: Logans Lagoon, Camerons Inlet, Patriarch Inlet, Middle Inlet and the Foo Choo Inlet.

The Furneaux Drainage Area, which includes the War Service Land Settlement Furneaux Estate Subdivision and the adjacent Wingaroo Subdivision, was proclaimed in 1978.

The Furneaux Drainage Area covers some 39 500 hectares including 5 000 hectares of Crown land unfit for agricultural purposes. There are approximately 150 blocks in the area

It is estimated that there are 500-600 km of common drains and a similar length of feed drains, including some 130 concrete/stone drops.

The total capital cost incurred to 30 June 1984 amounted to \$39 707.

### **Further References**

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### Chapter 16

### TRADE, DISTRIBUTION AND TOURISM

### OVERSEAS AND INTERSTATE TRADE

#### Historical

The Statistical Returns of Van Diemen's Land and the Statistics of Tasmania provide a continuous series of total trade statistics dating from 1824 to 1909. Until the foundation of the Commonwealth in 1901, trade with other parts of Australia was recorded as originating from or being destined for 'British Colonies'; in other words, all Tasmanian sea trade was regarded as overseas. From Federation to 1909, statistics were collected and compiled by the newly formed federal Customs Department for all sea trade, but since 1910 only direct overseas trade has been recorded by Australian Customs. In an island State, it became apparent that statistics of overseas trade alone were inadequate to record economic activity and, from 1922-23, the Government Statistician collected and published details of interstate trade. The collection of these data, now undertaken independently by the State Office of the Australian Bureau of Statistics, depends primarily on documents made available by Tasmanian port authorities and Australian Customs. In brief, there is a total trade series (1824-1909), an overseas trade series (1910 to 1921-22) and a total trade series (1922-23 to today).

In the immediate post-war period, there was a marked expansion of commercial aviation; the freight being carried was a component of interstate trade and steps were taken to record it, the first published figures appearing for 1949-50. Thus, the total trade of Tasmania is now recorded in three categories: overseas, by sea and air; interstate by sea; and interstate by air.

### Definition of 'Overseas' and 'Interstate'

Statistics on Tasmanii 's overseas trade include details of goods landed directly from overseas ports and goods of Tasmanian origin exported directly or transhipped through other Australian States to overseas countries. Prior to 1 July 1978 overseas export statistics comprised details of goods exported overseas for which the export documentation was lodged with the *Bureau of Customs* in Tasmania. Accordingly, due to this change in the method of recording overseas exports, figures for 1978-79 and following years are not directly comparable with those for previous years.

Statistics of interstate trade include details of goods landed in or shipped from Australian States. In addition, details of goods imported from overseas through other Australian States are included provided that the overseas import documentation has been lodged with customs in another Australian State. They do not include details of exports transhipped through Australian States.

By way of example, a new Japanese car transhipped in Melbourne and discharged in Tasmania is classified as an item of interstate trade. Victoria, not Japan, is classified as the place of origin, provided that the overseas import document has been lodged with Customs in Victoria.

### Source of Trade Statistics

Overseas trade statistics are compiled from documents obtained under the Federal Customs Act 1901 and supplied to the Australian Bureau of Statistics by the Australian

Customs. *Interstate sea* trade statistics are compiled from documents required under the authority of the *Marine Act* 1976 and made available to the Tasmanian Office of the ABS by the various port authorities. Statistics of *interstate air* trade are compiled from returns furnished direct to the Tasmanian Office of the ABS by all those who use this medium for the transportation of goods in commercial or industrial operations.

#### Values

The cost of importing goods into any country will theoretically contain four elements: the 'original' price at door of factory, warehouse, etc.; the cost of delivering goods to the ship 'free on board'; sea freight and associated charges between ports; and cost of delivery from port to buyer.

Trade statistics base values on the first two elements but exclude the third and fourth as set out in the following definitions:

Overseas Exports: Goods sold to overseas buyers before export are valued at the 'free-on-board' (f.o.b.) port of shipment equivalent of the actual price paid to the exporter. Goods shipped on consignment are valued at the f.o.b. port of shipment equivalent of the current price offering for similar goods of Tasmanian origin in the principal markets of the country to which they are despatched for sale.

Overseas Imports: The recorded value for overseas imports is the 'value for duty' as required for customs purposes. On 1 July 1976 Australia adopted the internationally recognised Brussels Definition of Value on a f.o.b. basis (i.e. charges and expenses involved in delivering the goods from the place of exportation to the place of introduction in Tasmania, are excluded). The value for duty is based on the normal price (i.e. the price the goods would fetch at the time when duty becomes payable on a sale in the open market between a buyer and a seller independent of each other). In practice, the basis for valuation is generally taken to be the invoice price subject to certain safeguards and adjustments where necessary. This new basis of valuation differs from that used prior to July 1976 which, broadly, was based on the higher of actual selling price or current domestic value (in the country of export) plus charges involved in placing the goods free-on-board the vessel at the port of export. Because of the change in the basis of valuation the recorded overseas import figures from 1 July 1976 are not directly comparable with those for previous years. It is estimated that if the previous basis of valuation had continued, the value of total overseas imports would have been about 2 per cent higher than the recorded values on the new basis.

Interstate Imports and Exports: These are valued at the f.o.b. port of shipment equivalent of the actual price at which the goods were sold.

### Tasmanian Ports

Although there are seven port authorities (usually called marine boards) in Tasmania, overseas trade is restricted to the ports of Hobart, Launceston, Burnie, Devonport and Stanley. (Exports of iron ore from Port Latta are credited to Stanley and exports of woodchips from Spring Bay are credited to Hobart.) The names of ports in subsequent tables refer to the cities or towns in which the controlling port authorities are located. Thus 'Hobart' includes Port Huon, Spring Bay, Howden and Strahan; 'Launceston' includes Bell Bay, Inspection Head and Long Reach; 'Stanley' includes Port Latta; 'Currie' includes Naracoopa and Grassy; and 'Lady Barron' includes Whitemark.

This chapter deals only with the imports and exports passing through these ports. For a description of the major ports and for the financial operations of the port authorities, see Chapter 17.

### Total Trade of Tasmania

The following table shows Tasmanian total trade and its components in recent years. It will be observed that interstate trade is the major element both in imports and exports (but imports include some goods transhipped through other Australian ports—see earlier

definitions). See the Statistical Summary at the end of this book for a detailed historical series.

Total	Trade,	Tasmania
	(\$'00	(0)

_		Imp	orts			Exp	orts	
	Overseas	Inters	tate	Total	Overseas	Inters	tate	Total
Year	By sea	By sea(a)	Air	imports(a)	By sea and air	By sea	By air	exports
1978-79	140 652	621 598	74 578	836 829	513 286	627 186	39 727	1 180 199
1979-80	179 780	935 584	53 481	1 168 845	646 827	772 531	32 141	1 451 499
1980-81	172 456	973 685	60 922	1 207 063	658 013	837 042	45 171	1 540 226
1981-82	166 032	1 031 330	61 187	1 258 548	647 617	879 421	47 525	1 574 562
1982-83 r	179 819	1 084 743	74 552	1 339 113	773 133	904 983	50 833	1 728 949
1983-84	202 786	n.y.a.	n.y.a.	n.y.a.	774 404	n.y.a.	n.y.a.	n.y.a.

<sup>(</sup>a) Data for 1979-80 onwards are not directly comparable with data for earlier years.

The next table shows the balance of trade (excess of exports over imports):

Balance of Trade (Sea and Air), Tasmania (a)

•	Balance of trade (excess of exports)		of exports)			trade (excess aports)
Year	Total (\$'000)	Per head of mean popu- lation (\$)		Year	Total (\$'000)	Per head of mean popu- lation (\$)
1977-78 1978-79 1979-80	<u>277 084</u> <u>343 370</u> 282 654	665 819 669	1980-81 1981-82 1982-83		333 163 316 014 389 836	783 737 905

<sup>(</sup>a) Data for 1978-79 onwards are not directly comparable with data for earlier years.

The following table compares Australia's total overseas imports and exports with the corresponding values for Tasmania; by using a per capita comparison, certain conclusions can be drawn about the relative importance of Tasmania's overseas exports.

Value of Overseas Trade: Tasmania and Australia

Particulars	1979-80	1980-81	1981-82	1982-83	1983-84
	Impo	rts			
Australia—Total \$'000 Per head \$ Tasmania—Total \$'000 Per head \$	16 217 527 1 110.9 179 780 426.9	18 964 604 1 280.7 172 456 405.5	23 004 685 1 528.4 166 032 387.5	21 806 179 1 426.9 r 179 819 r 417.3	24 060 997 1 556.3 202 786 466.4
	Expo	rts			
Australia—Total \$'000 Per head \$ Tasmania—Total \$'000 Per head \$	18 870 917 1 292.6 646 827 1 536.0	19 176 955 1 295.0 658 013 1 547.2	19 575 206 1 301.0 647 617 1 511.4	22 061 623 1 443.6 r 773 133 r 1 794.2	24 766 639 1 601.9 774 404 1 781.1

The relatively low value of overseas imports per head of Tasmania's mean population is due largely to the transhipment of goods imported from overseas through other Australian ports. However, Tasmania has a healthy balance of total trade. As shown in the previous table, the balance of trade (excess of exports over imports) in 1982-83 was \$905 per head of mean population. The export comparisons per head of Australian and Tasmanian mean populations suggest that the State plays an important role as an earner of export income for Australia.

### **Tasmanian Exports**

The following table shows the value of principal commodities exported (interstate and overseas) from Tasmania by sea and air:

Exports of Principal Commodities by Sea and Air: Values, Tasmania (\$'000)

Commodity	1980-81	1981-82	1982-83
Butter (including butter oil)	2 703	867	3 725
Cheese	22 414	25 827	23 410
Fish—Abalone	18 253	21 370	17 272
Rock lobster	5 595	7 577	11 159
Other	1 384	1 501	4 990
Fruit—Apples (fresh)	12 004	19 147	22 220
Juices	1 697	1 550	1 906
Other	3 630	3 673	6 024
Hides and skins (excluding fur skins)	6 551	8 256	7 796
Hops	3 962	3 965	5 647
Live animals— Cattle	8 585	15 622	7 349
Sheep	5 988	5 507	5 391
Machinery	10 745	9 989	9 610
Meat—Beef and veal	27 555	28 194	40 992
Lamb and mutton	6 903	7 550	10 504
Other	1 432	1 800	1 789
Metals refined—Cadmium	2 780	1 932	1 218
Zinc	135 276	162 700	164 424
Ores and concentrates—Copper	40 628	23 811	30 085
Iron	46 728	56 191	81 663
Lead	26 114	37 959	26 165
Tin	70 189	66 530	92 324
Tungsten	37 568	26 915	14 612
Tallow	3 119	4 127	4 064
Textile yarn, fabrics and made-up articles	45 047	46 095	50 073
Timber (Dressed and undressed)	85 254	82 206	70 031
Vegetables— Fresh	4 970	5 224	8 237
Preserved	62 637	64 278	63 282
Wool, greasy	48 422	48 000	48 161
Commodities not available for publication (a)	638 838	629 761	712 324
All other merchandise	78 096	81 225	101 129
7 in other merchandisc	/8 090	81 223	101 129
Total merchandise	1 465 067	1 499 349	1 647 576
Non-merchandise—			
Motor vehicles (b)	65 041	72 889	76 918
Other	10 118	1 456	1 490
Re-exports	n.a.	332	2 966
Total	1 540 226	1 574 026	1 728 949

<sup>(</sup>a) Commodities comprising this item are: aluminium, alumina, beadings and mouldings, paper, hard-board, cement, ferro-manganese, silicon-manganese, confectionery, cocoa and chocolate, food beverages, paper pulp, metal scrap, calcium carbide, titanium oxides, plywood, rutile, zirconium, particle board, asbestos-cement articles, ferro-silicon and woodchips.

The next table shows the quantities of the principal commodities exported and has been compiled, as far as possible, to match the preceding table of values:

<sup>(</sup>b) Mainly tourist and other motor vehicles exported as personal effects.

Exports of Prin	ncinal Comm	odities by Se	es and Air:	Ouantities.	Tasmania

•				
Commodity (a)	Unit of quantity	1980-81	1981-82	1982-83
Butter (including butter oil)	t	1 510	413	1 265
Cheese	t	13 302	13 782	11 029
Fish—Abalone	t	1 812	2 006	1 615
Rock lobster	t	683	922	1 231
Other	t	486	367	n.a.
Fruit—Apples (fresh)	t	38 558	49 573	38 684
Juices and syrups	'000 L	1 164	757	970
Other	t	6 497		6 675
Hides and skins (excluding fur skins)	t	6 561	8 062	6 624
Hops	t	1 316	1 264	1 555
Live animals— Cattle	no.	26 291	53 464	25 411
Sheep	no.	234 542	270 078	300 399
Meat—Beef and veal	t	13 367	14 989	19 582
Lamb and mutton	t	5 262	6 373	9 399
Other	t	1 087	1 498	1 411
Metals, refined-Cadmium	t	662	662	690
Zinc	t	194 115	199 774	203 759
Ores and concentrates—Copper	t	78 444	63 937	77 306
Iron	'000 t	2 101	1 935	2 210
Lead	t	27 534	61 682	51 534
Tin	t	14 109	12 922	14 668
Tungsten	t	3 940	3 498	2 192
Tallow	t	7 643	11 491	10 235
Timber	$m^3$	265 488	255 366	267 441
Vegetables— Fresh	t	23 615	20 566	31 506
Preserved	t	108 613	107 934	102 108
Wool, greasy	t	16 356	15 698	15 293
Non-merchandise—				
Motor vehicles (b)	no.	21 537	21 954	21 248

<sup>(</sup>a) Principal commodities not available for publication comprise: aluminium, alumina, hardboard, cement, ferro-manganese, silicon-manganese, confectionery, cocoa and chocolate, food beverages, paperpulp, metal scrap, calcium carbide, titanium oxides, plywood, rutile, zirconium, particle board, asbestos-cement articles, ferro-silicon and woodchips.

The following table shows total value details of Tasmanian exports to overseas countries. The principal countries of destination for exports (value in \$1m) were: Japan 277.9; United States of America 101.6; Malaysia 62.5; Indonesia 46.7; and China (excluding Taiwan Province) 39.4.

Exports to Overseas Countries, Tasmania (\$'000)

	(4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4					
Country of origin or destination	1981-82	1982-83	1983-84			
Association of South East Asian						
Nations (ASEAN)—						
Indonesia	49 260	50 318	46 741			
Malaysia	73 347	103 964	62 479			
Philippines	5 396	8 411	7 591			
Singapore, Republic of	9 820	13 787	16 166			
Thailand	17 702	19 819	20 607			
Total ASEAN	155 524	196 300	153 583			
European Economic Community (EEC)—						
	12 773	4 178	5 840			
Belgium-Luxembourg			498			
Denmark	190	378				
France	6 774	10 456	8 400			

<sup>(</sup>b) Mainly tourist and other motor vehicles exported as personal effects.

### TRADE, DISTRIBUTION AND TOURISM

# Exports to Overseas Countries, Tasmania (\$'000)—continued

Country of origin			
or destination	1981-82	1982-83	1983-84
Common Federal Box 11 of	22.244	15.400	10.07
Germany, Federal Republic of	22 244	15 493	19 070
Greece	1 881	2 540	2 579
Ireland	189	287	630
Italy	6 093	6 496	8 569
Netherlands	6 062	6 894	6 741
United Kingdom	21 803	9 113	12 877
Total EEC	78 008	55 836	65 204
Other Major Trading Partners—			
Canada	1 394	2 498	2 412
China—excluding Taiwan Province .	11 769	36 395	39 448
Taiwan Province	15 834	16 706	28 880
Finland	1 276	967	826
Hong Kong	25 258	20 302	30 668
India	8 242	6 436	2 342
Iran	_	4 088	336
Japan	221 458	274 446	277 933
Korea, Republic of	3 764	13 968	8 931
New Zealand	11 370	10 804	13 267
Norway	2 742	1 301	3 274
Papua New Guinea	2 703	1 955	2 475
Poland	2 979	1 517	2 378
Qatar	185	3 493	2 110
South Africa	1 811	653	3 437
Sweden	4 793	1 635	1 664
United States of America	72 737	89 423	101 614
USSR	7 831	10 105	4 332
Other Countries	r 17 606	r 21 249	21 946
Re-exports	332	2 966	7 346
Total overseas exports	647 617	773 044	774 404

Value details for commodities exported to principal overseas countries are shown in the next table:

Value of Exports to Principal Overseas Countries, Tasmania (\$'000)

Commodity	1981-82	1982-83	1983-84
	Japan		
Abalone	11 851	6 477	9 968
Cheese	972	1 969	2 041
Ferro-alloys	2 281	3 921	2 749
Meat—Beef and veal	7 032	6 762	5 542
Lamb and mutton	3 941	4 079	4 043
Other	410	285	240
Milk, dried	1 076	3 021	1 461
Onions, fresh	437	381	1 669
Ores and concentrates—			
Copper	21 640	r 24 566	36 662
Leâd	<del></del>	5 248	6 054
Iron	56 183	r 81 633	65 506
Tungsten	2 313	795	
Wool, greasy	8 454	5 100	6 752
Zinc			3 687
Restricted items (a)	102 188	127 241	126 866
Other	r 2 682	r 2 968	4 693
Total	221 458	274 446	277 933

### OVERSEAS AND INTERSTATE TRADE

# Value of Exports to Principal Overseas Countries, Tasmania (\$'000)—continued

)—continued		
1981-82	1982-83	1983-84
ates of America		
2 416	2 104	1 142
15 749	24 318	11 566
511	567	586
759	1 156	1 371
5 088	3 647	4 333
2 255	3 235	5 983
18 963	19 617	31 043
1 363	906	663
		2 280
		4 945
		26 113
		4 464
4 873	5 765	7 124
70.737	90.422	101 (14
12 131	89 423	101 614
<b>f</b> alaysia		
539	524	557
434	360	221
2 680	1 713	2 075
		46 117
		5 380
		5 628
2 154	2 017	2 501
73 347	103 964	62 479
ndonesia		
1 614	2 557	1 325
		1 844
		38 005
		2 784
1 578	1 927	2 783
49 260	50 318	46 741
ding Taiwan Provinc	e	
202	782	
		14 406
		24 908
20		134
11 769	24.225	39 448
	1981-82  lates of America  2 416 15 749 511 759 5 088 2 255 18 963 1 363 2 203 696 15 733 2 129 4 873  72 737  Malaysia  539 434 2 680 61 462 3 461 2 618 2 154 73 347  Indonesia  1 614 1 441 41 693 2 935 1 578 49 260  Inding Taiwan Province  202 6 429 5 118 20	1981-82

<sup>(</sup>a) Comprises the value of item for which details are not available for separate publication.

Quantity details for commodities exported to principal overseas countries are shown in the next table:

Quantity of Exports to Principal Overseas Countries, Tasmania

Commodity	Unit of	1981-82	1982-83	1983-84
		Japan		
Abalone	t	1 242	683	1 029
Cheese	t	533	1 039	1 289
Ferro-alloys	t	5 200	8 312	4 609
Meat—Beef and veal	t	3 397	2 504	2 188
Mutton	t	3 396	4 383	3 130
Other	t	170	135	96
Milk, dried	t	775	2 101	1 120
Onions, fresh	t	1 702	871	3 357
Ores and concentrates—				
Copper	t	59 871	61 301	90 074
Iron	'000 t	1 934	2 209	2 109
Lead	t		21 025	20 493
Tungsten	ť	289	120	_
Wool, greasy	ť	2 847	1 686	1 983
Zinc	t	_	_	3 548
	United	States of America		
Abalone	t	195	185	94
Beef and veal	t	8 800	12 108	5 268
Cadmium	t t	180	281	300
Casein	*	255	369	494
~-	t	2 782	1 854	2 048
	t	6 412	10 300	18 673
Ferro-alloys	t			27 157
Lead concentrates	t	25 374	24 199	
Rock lobster	t	168	201	129 1 135
Wool, greasy	t	197	514	
Zinc	t	19 708	22 624	22 916
		Malaysia		
Apples, fresh or chilled	t	1 400	946	. 1111
Meat, fresh or frozen	t	291	300	233
Paper	t	4 397	2 582	2 939
Tin concentrates	t	11 170	14 590	6 956
Zinc refined	t	3 964	4 301	5 225
		Indonesia		
Ferro-alloys	t	4 965	10 500	4 222
Food beverages	t	997	807	851
Zinc	t	53 735	49 884	38 940
	China — Exc	cluding Taiwan Provin	nce	
Tallow	t	542	1 887	
Zinc	t	8 423	29 302	15 519

### **Tasmanian Imports**

The next table shows the value of the selected commodities (interstate and overseas) imported into Tasmania by sea and air for a three-year period:

Value of Imports of	f Selected	Commodities	by Sea	and	Air,	Tasmania (a)
-		(\$'000)	•			

Commodity	1980-81	1981-82	1982-83
Ores and concentrates and metal scrap	77 885	109 728	111 061
Coal, coke and briquettes	6 852	6 665	7 005
Motor spirit	82 815	94 782	117 981
Auto distillate	58 905	56 061	66 236
Furnace fuel	32 285	48 071	41 182
Iron and steel	22 473	30 517	30 072
New passenger motor vehicles	61 129	63 694	61 496
New commercial vehicles	30 228	23 951	25 309
All other merchandise commodities	769 983	754 682	800 075
Total merchandise commodities	1 142 555	1 188 151	1 260 417
Non-merchandise commodities—			
Motor vehicles (passengers' personal effects)	63 272	69 006	77 154
Other non-merchandise	1 236	1 391	1 542
Total imports	1 207 063	1 258 548	1 339 113

<sup>(</sup>a) Only a restricted range of items has been included due to coverage problems relating to interstate imports by sea.

The table that follows shows the quantities of the selected commodities imported and has been compiled, as far as is practicable, to match the preceding table of values.

Quantity of Imports of Selected Commodities by Sea and Air, Tasmania (a)

Commodity	Unit of quantity	1980-81	1981-82	1982-83
Ores and concentrates and metal scrap	t	745 747	736 096	731 176
Coal, coke and briquettes	t	109 907	96 262	104 351
Motor spirit	'000 L	368 976	373 131	431 829
Auto distillate	'000 L	222 198	186 251	208 947
Furnace fuel	'000 L	194 369	255 695	218 814
New passenger motor vehicles	no.	13 021	12 591	10 169
New commercial vehicles	no.	4 033	3 430	3 367
Non-merchandise commodities— Motor vehicles (passengers' personal effects)	no.	20 932	20 946	21 280

<sup>(</sup>a) Only a restricted range of items has been included due to coverage problems relating to interstate imports by sea.

The following table shows value details of Tasmanian imports from overseas countries. It should be noted that some goods are received from overseas countries by transhipment through other Australian States; no data are available on such transactions.

Imports from Overseas Countries, Tasmania (\$'000)

(\$ 666)								
Country of origin or destination	1981-82	1982-83	1983-84					
Association of South East Asian								
Nations (ASEAN)—								
Indonesia	286	158	199					
Malaysia	2 742	2 889	2 457					
Philippines	394	448	585					
Singapore, Republic of	1 630	19 978	3 049					
Thailand	1 625	1 396	793					
Total ASEAN	6 678	24 870	7 082					

### TRADE, DISTRIBUTION AND TOURISM

# Imports from Overseas Countries, Tasmania (\$'000)—continued

Country of origin or destination	1981-82	1982-83	1983-84
O. Westmatton	1701-02	1702-03	1703-04
Ennounce Francis Control			
European Economic Community			
(EEC)—	410	100	500
Belgium—Luxembourg	419	456	593
Denmark	414	232	422
France	2 714	3 720	1 952
Germany, Federal Republic of	3 570	4 563	4 993
Greece		3	47
Ireland	63	10	21
Italy	1 655	1 490	1 178
Netherlands	4 700	6 862	7 136
United Kingdom	12 477	11 633	11 966
Total EEC	26 013	28 969	28 309
Other Major Trading Partners—			
	16740		
	16 749	13 111	13 404
China—excluding Taiwan Province	1 030	882	1 517
Taiwan Province	11 068	10 805	12 076
Finland	3 406	1 212	7 358
Hong Kong	1 541	1 074	1 406
India	228	108	273
Iran			1
Japan	28 536	24 229	41 142
Korea, Republic of	3 652	3 334	6 782
Nauru	4 058	2 671	3 798
New Zealand	18 001	17 620	20 877
Norway	3 008	1 397	1 962
Papua New Guinea	-manusan	_	_
Poland	46	54	357
Qatar	_	_	
South Africa	2 699	3 029	6 216
Sweden	2 935	2 118	5 915
United States of America	28 335	24 251	37 307
USSR	26 333	14	25
Other Countries	r 7 936	r 19 849	6 676
Australia (re-imported)	102	216	302
	102	210	302
Total overseas imports	166 032	179 814	202 786

The principal countries of origin, together with values (in \$m) for overseas imports shipped direct to Tasmania in 1983-84 were: Japan, 41.1; United States of America, 37.3; New Zealand, 20.9; Canada, 13.4; and China (Taiwan Province), 12.1. Value figures for the main commodities are shown in the next table:

Value of Imports from Principal Overseas Countries, Tasmania (\$'000)

()								
Commodity	1981-82	1982-83	1983-84					
Japan								
Chemicals	2 492	3 395	3 882					
Commercial vehicles	8 155	8 050	15 894					
Machinery	6 612	3 826	10 872					
Motor cycles	1 117	856	1 091					
Passenger motor vehicles	6 722	5 135	7 018					
Textiles	840	879	774					
Other (a)	2 598	2 088	1 611					
Total	28 536	24 229	41 142					

continued next page

# Value of Imports from Principal Overseas Countries, Tasmania (\$'000)—continued

Commodity	1981-82	1982-83	1983-8
United States of	America		
Chemicals	394	1 264	1 47
Chemicals			
Clays	864	1 506	1 66
Coke of coal	189	2.001	4 45
Machinery	5 793	3 981	4 45
Petroleum coke	8 465	6 865	7 83
	4 438	2 275	15 40
Textiles	1 736	994	1 18
Transport equipment	229	2 275	15
Wood pulp	1 808	1 375	1 02
Other (a)	4 419	3 716	4 10
Total	28 335	24 251	37 30
New Zeala	nd		
Food and beverages	660	1 060	2 000
Machinery	553	575	83
Metal manufactures	1 181	1 870	2 17
Paper and paper board	648	968	1 28
Textiles	441	338	47
Wood pulp	11 951	9 740	10 10
Wool	1 331	1 113	1 99
Other (a)	1 236	1 957	2 00
Total	18 001	17 620	20 87
Canada			
Asbestos	185	243	5.
Chemicals	2 222	1 392	1 50
Machinery	2 263	480	70
Textiles	243	311	17
Wood pulp	10 074	10 417	10 20
Other (a)	1 762	268	75
Other  u)		200	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
Total	16 749	13 111	13 40
China—Taiwan Pro	vince Only		
Diesel fuel			36
Machinery	209	298	65
Metal manufactures	489	308	30
Textiles	6 850	9 714	9 11
Other (a)	3 520	485	1 63
Total	11 068	10 805	12 07

<sup>(</sup>a) Includes value of items not available for separate publication.

Quantity details for the main commodities (where available) are shown in the following table:

Quantity of	Imports :	from	Principal	Overseas	Countries,	Tasmania
-------------	-----------	------	-----------	----------	------------	----------

Unit of quantity	1981-82	1982-83	1983-84
apan			
no.	2 083	1 844	325
no.	2 136	1 479	1 128 1 620
ites of Americ	а		
t t	15 208 809	28 757	19 450
,000L	40.562	16 228	86 837
t	4 803	43 099	60 698 2 490
Zealand		'	
t t	32 007 465	25 121 422	25 511 685
anada			
t t	262 24 379	315 26 359	70 25 619
an Province C	Only		
'000L		_	1 225
	of quantity  Japan  no. no. no. tes of Americ  t '0000L t t  Zealand  t t anada  t t anada	of quantity  Iapan  no. 2 083 no. 1 523 no. 2 136  Ites of America  t 15 208 t 809 '000L — t 49 562 t 4 803  Zealand  t 32 007 t 465  anada  t 262 t 24 379  an Province Only	1981-82   1982-83

### **OVERSEAS SHIPPING AT TASMANIAN PORTS**

### System of Record

From 1 July 1978 shipping statistics are compiled for overseas shipping only. Statistics relating to overseas and interstate shipping at Tasmanian ports for 1977-78 and earlier years are included in the 1981 issue of the *Year Book*.

Overseas shipping statistics are compiled from returns submitted by shipping companies or their representatives to the ABS via Customs Houses at each port in Tasmania. A return is required for each vessel calling at or departing from Australian ports for the purpose of carrying cargo from or to overseas ports. A return must be submitted even if cargo is not discharged or loaded.

Details are not included for the following:

- naval vessels:
- yachts and other craft used for pleasure;
- foreign fishing vessels visiting Australian ports for purposes other than the loading or discharge of cargo;
- geophysical, oceanographic research and seismic survey vessels;
- off shore oil drilling rigs and related vessels;
- Australian registered vessels operating from Australian ports;
- all vessels of 200 registered net tonnes and under.

### Unit of Quantity

Revenue tonne is the unit of quantity predominantly used in the shipping industry. It is the basis on which freight is charged and is obtained by adding mass (tonnes) and volume (cubic metres) units. Because revenue tonnes are derived by adding mass and volume units, they should be used with care.

Overseas	Cargo	Discharged	at	Tasmanian	Ports
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		1981-82	1-82			1982-83	
Port	No. of vessels (a)	Vessel calls (b)	Revenue tonnes	No. of vessels (a)	Vessel calls (b)	Revenue tonnes	
Burnie	15	95	71 657	85	91	77 784	
Devonport	9	19	6 556	13	25	12 430	
Hobart	53	144	183 687	127	172	182 870	
Launceston	62	112	95 743	57	115	50 300	
Port Latta	24	25		· —	30	39 332	
Spring Bay	4	4		1	5		
Stanley	2	2	17 334				
Total	169	401	374 977	283	438	362 716	

<sup>(</sup>a) (b) See footnotes to next table.

### Overseas Cargo Loaded at Tasmanian Ports

		1981-82			1982-83		
Port	No. of vessels (a)			No. of vessels (a)	Vessel calls (b)	Revenue tonnes	
Burnie	13	96	282 871	78	92	246 852	
Devonport		19	23 786	17	23	40 979	
Hobart	61	153	672 818	77	158	659 708	
Launceston	57	113	1 635 997	52	116	1 699 176	
Port Latta		25	1 948 657	1	28	2 040 628	
Spring Bay	4	4	94 843		5	130 535	
Stanley		2		_			
Total	165	412	4 658 972	225	422	4 817 878	

<sup>(</sup>a) 'No. of vessels' refers to the number of direct overseas arrivals to, or departures from, Tasmania.

### RETAIL TRADE IN TASMANIA

### **Establishments**

The following table provides structural details of the retail trade sector in the State. The number of retail establishments and employment are shown classified according to categories of retail establishments from figures derived from censuses of retail and selected service establishments conducted in 1974 and 1980.

Retail and Selected Service Establishments and Persons Employed by Industry Class Tasmania, June 1974 and 1980

		19	074	19	980	
Description	ASIC code (a)	Establish- ments	Persons employed (b)	Establish- ments	Persons employed (b)	
		no.	no.	no.	no.	
Food stores	488	1 441	6 114	1 374	6 954	
retailers	486	955	5 683	1 065	5 468	
Clothing, fabrics and furniture stores	484	529	2 703	703	2 855	

continued next page

<sup>(</sup>b) 'Vessel calls' refers to the number of port visits that an overseas vessel makes in Tasmania.

Retail and Selected Service Establishments and Persons Employed by Industry Cla	iss
Tasmania June 1974 and 1980—continued	

			974		980
Description	ASIC code (a)	Establish- ments	Persons employed (b)	Establish- ments	Persons employed (b)
Household appliance and hardware stores Department and general stores Other retailers	485 481 489	291 80 571	1 354 2 766 2 154	335 40 751	1 216 2 530 2 541
Total retail establishments		3 867	20 774	4 268	21 564
Cafes and restaurants Licensed clubs Hairdressers and beauty salons Laundries and dry cleaners Motion picture theatres	9 231 9 241-43 935 9 340 9 133	130 163 256 n.a. n.a.	1 171 673 773 n.a. n.a.	199 185 271 59	1 572 770 840 349 150

<sup>(</sup>a) Australian Standard Industrial Classification (1978 Edition).

### Quarterly Estimates of Value of Retail Sales

Each quarter, the ABS collects returns of retail sales from a sample of all retail businesses recorded in the most recent census of retail establishments. The sample is maintained between censuses by the addition of new businesses and the deletion of businesses which have ceased trading.

From June quarter 1982 the survey has been based on results of the 1979-80 census of retail establishments. It is important to note that there have been changes in the scope, coverage and commodity definitions from those used in the previous sample survey based on the 1973-74 retail census.

Comparison of estimates in this series with estimates from the previous series, based on the 1973-74 census, are facilitated by the inclusion of estimates for the June quarter 1982 on each basis.

The following tables set out details of estimated value of retail sales, by commodity groups:

Estimated Value of Retail Sales by Commodity Groups, Tasmania (\$ million)

				Commodit	y group		
Year or quarter	Groceries	Fresh meat	Other food	Beer, wine, and spirits	Clothing, drapery, and footwear	Kitchenware, china, glassware and electrical goods	Furniture and floor coverings  21.4 39.0 39.9 42.3 41.5
1973-74 (a)	63.8	26.2	35.8	47.8	76.1	38.9	21.4
1979-80 (a)	168.0	55.9	71.9	105.6	151.0	81.2	39.0
1980-81	171.5	55.2	99.0	114.0	154.6	89.6	39.9
1981-82	195.1	60.3	106.8	122.3	166.6	95.8	42.3
1982-83 1983—	234.8	63.6	91.4	119.5	186.6	108.5	41.5
June	61.0	17.1	20.2	28.0	47.9	26.0	10.7
September	64.0	18.4	23.5	28.9	44.5	26.8	11.7
December	72.6	18.7	27.7	36.3	58.7	37.9	13.2
March	66.5	18.6	25.5	32.7	43.6	29.0	11.8

continued next page

<sup>(</sup>b) Includes working proprietors.

# Estimated Value of Retail Sales by Commodity Groups, Tasmania (\$ million)—continued

		Commodity	Group		Seasonally			
Year or quarter		Newspapers,		adjusted, Total total		Total at average 1979-80 prices		
	Cosmetics, medicines, etc.	books and stationery	Other goods	(excl. motor vehicles etc.)	(excl. motor vehicles etc.)	Original	Seasonally adjusted	
1973-74 (a)	20.2	13.1	31.3	374.5	••	n.a.		
1979-80 (a)	36.7	31.4	76.2	816.9		807.7	••	
1980-81	47.2	41.9	72.8	885.7		816.5	••	
1981-82	51.2	43.8	83.9	968.1		827.9		
1982-83 1983—	48.5	44.1	91.8	1 030.5		811.2		
June	10.4	10.2	21.7	253.3	259.6	193.0	197.2	
September	11.0	10.3	23.3	262.4	272.5	196.7	204.1	
December	13.0	14.1	31.5	323.6	289.6	238.9	214.7	
March	11.0	12.5	25.0	276.3	289.4	201.1	210.0	

<sup>(</sup>a) Actual retail census results.

From April 1982 a new series of monthly retail sales estimates by industry group has been published by the ABS. The monthly survey is based on a random sample of retail and selected service establishments (hotels, cafes, restaurants, etc.) drawn from the 1979-80 retail census. This sample is maintained by the addition of new businesses and deletion of businesses which have ceased trading.

The following table presents a series of these estimates together with comparable 1979-80 retail census results:

Estimated Monthly Value of Retail Sales by Industry, Tasmania (a)
(\$ million)

Period	Grocers, confec- tioners, tobacco- nists	Butchers	Other food stores	Hotels, liquor stores, licensed clubs	Clothiers	Depart- ment stores	Footwear stores	Hardware stores
1979-80 (b)	248.1	40.4	32.2	102.0	68.9	107.2	16.0	13.6
1983—								
April	29.9	3.2	2.7	9.7	7.9	11.1	1.9	1.3
May		3.5	3.1	9.3	7.9	10.9	1.8	1.5
June		3.7	3.0	9.3	7.5	9.7	1.8	1.3
July		3.8	3.8	9.3	7.1	9.8	1.7	1.4
August		3.6	4.0	9.9	7.2	9.8	1.5	1.5
September		3.4	4.2	10.2	6.8	10.2	1.7	1.7
October		3.5	4.4	10.7	7.2	9.6	1.6	1.7
November		3.6	4.5	10.7	7.7	12.1	1.8	1.7
December		4.3	4.7	15.3	13.1	22.8	2.3	3.4
1984—								
January	31.5	3.4	4.5	11.1	6.5	9.8	1.6	1.4
February		3.8	4.2	10.6	6.7	9.8	1.8	1.5
March		4.2	4.0	11.5	8.1	11.1	2.1	1.5
April		3.7	3.8	10.9	8.6	11.0	2.3	1.3
May		4.1	4.2	10.8	9.7	13.5	2.7	1.6
June		4.0	3.9	10.7	8.7	11.8	2.0	1.3
July	22.0	4.1	3.9	10.4	9.2	12.1	2.2	1.0

# Estimated Monthly Value of Retail Sales by Industry, Tasmania (a) (\$ million)—continued

Period	Electrical goods stores	Furniture stores	Floor coverings stores	Chemists	Newsagents	Other (c)	Total
1979-80 <i>(a)</i>	43.4	28.8	12.1	29.2	26.9	41.3	810.2
April	4.6	2.1	1.1	3.0	3.0	4.8	86.3
May	4.9	2.6	1.2	3.0	3.0	4.6	86.6
June	4.4	2.9	1.1	3.2	2.9	4.4	84.3
July	4.2	2.5	1.1	3.1	2.9	4.6	85.4
August	5.0	3.0	1.2	3.1	2.9	5.3	89.3
September	4.5	2.9	1.2	3.2	2.8	5.1	88.9
October	4.1	2.9	1.1	3.1	3.1	5.7	90.5
November	5.3	3.4	1.3	3.1	3.3	5.9	97.9
December	8.7	3.9	1.2	4.3	4.7	7.5	135.2
1984							
January	4.6	2.5	1.3	3.0	3.3	4.2	88.7
February	4.6	2.7	1.5	3.0	3.4	4.7	90.5
March	4.8	3.1	1.8	3.1	3.5	5.2	97.3
April	4.5	2.8	1.2	2.8	3.2	4.4	91.9
May	5.6	3.7	1.4	3.3	3.9	5.1	100.7
June	5.6	3.6	1.5	3.0	3.4	5.1	95.7
July	5.6	3.5	1.3	3.0	3.4	4.3	97.9

- (a) Series is based on the 1979-80 Retail Census. For standard errors of level and movement of monthly data, see the appropriate issue of the publication Retail Sales of Goods (excluding motor vehicles, parts, petrol, etc.), (8501.0).
- (b) Actual retail census results. Excludes (with the exemption of ASIC classes 9232 and 9233) single establishment enterprise with turnover of less than \$50 000.
- (c) Includes general stores, other goods stores, hairdressers and cafes and restaurants.

### EXPORT FINANCE AND INSURANCE CORPORATION

The Export Finance and Insurance Corporation (EFIC) is a public instrumentality guaranteed by the Commonwealth Government. EFIC's statutory function is the encouragement of trade with overseas countries by providing a specialised range of insurance, guarantees and financing facilities not normally obtainable from commercial insurers. It is required to operate on commercial lines and to be self-supporting. Australia-wide, EFIC has approximately 1 300 policyholders and insures and finances approximately \$2.5 billion worth of Australian exports each year.

### Range of EFIC Facilities

Facilities provided by EFIC fall into five main categories:

- insurance of exporters against the risk of non-payment by overseas buyers for a variety of commercial, economic and political risks;
- guaranteeing Australian banks and financial institutions in respect of finance they provide to Australian exporters;
- financing, at concessional rates of interest, Australian exports of capital goods and related services to match overseas competition;
- insuring Australian firms investing in enterprises in foreign countries against the risk of loss from expropriation, war damage or exchange transfer delays;
- assisting banks and insurance companies to provide the various types of bonding facilities and insuring exporters against the possible unfair calling of bonds established as support for export transactions.

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#### Assistance with Finance

EFIC does not provide finance for goods sold on relatively short payment terms. However, claims payable under EFIC's policies may be assigned to the bank or financial institution that is backing the policyholder. In this way, the EFIC policy can be used by the exporter as a form of collateral security to assist in financing his export trade.

### Cost of Cover

Premium rates are based on the markets to which the exporter ships and the length of credit which he extends to his overseas customers. At present, the average rate over the whole range of EFIC short-term business is less than 50c per \$A100 of exports insured.

### Activities within Tasmania

The EFIC Office serving the Victoria-Tasmania region is located in BHP House, 140 William Street, Melbourne (Telephone (03) 67 5302). Contact can also be made through the Regional Director, Department of Trade and Resources, Continental Building, 162 Macquarie Street, Hobart. During 1983-84, 17 Tasmanian EFIC policyholders had total export cover of \$5.7 million. Other Tasmanian companies had export insurance cover with EFIC arranged through their mainland head offices. Principal Tasmanian exports covered were dairy produce, fresh fruit and vegetables, timber and honey.

### **TOURISM**

### Introduction

Tourism and Tasmania go hand in hand as the 'Holiday Isle'. Few other places on the globe have the same variety, both natural and man-made, as Tasmania. Coupled with the increasing professionalism of tourist oriented entrepreneurs, it is not surprising that tourism is now Tasmania's second largest business sector in terms of its contribution to the State's economy, and it is capable of further strong growth.

### The Attractions of Tasmania

Although the island of Tasmania is small when compared to the mainland States, it has a diversity of attractions that is at least equal to any in Australia, and each part of the State has its own characteristic attractions. It can cater for just about every type of tourist.

The scenery, the relatively short distances between attractions and the high standard of highways make touring by car, bus or campervan a rewarding experience.

One of the features of Tasmania is its rugged terrain. From most areas mountain ranges are visible, and there is nowhere more rugged and spectacular than the western half of the State. Here is the beauty of crystal tarns, the splendour of cirque lakes, the might of thundering gorges and the tranquility of pristine rain forest. Backpacking, hiking and, for the experienced, white water rafting are recommended in the world heritage wilderness areas: the South-West National Park; the Wild Rivers National Park; and the Cradle Mountain—Lake St Claire National Park. Other features of the West Coast include the mining towns of Zeehan, Queenstown and Savage River with their turbulent history, and the cruises from the fishing town of Strahan through Macquarie Harbour to Sarah Island and the rainforest-fringed Gordon River.

In contrast to the 'wild west' the east coast is drier, warmer and has a more gentle topography. Extensive, unspoilt beaches are interspersed with bays that are the sites of fishing ports and holiday resorts. Most of the towns have high quality accommodation and other tourist facilities. The towns vary from the peaceful setting of Coles Bay under the granite mountains of Freycinet National Park to the developments at Bicheno which include holiday villages, bird-life and animal park (including free ranging Tasmanian native animals) and a sea-life centre. As well, there is big game fishing for the huge tuna that lurk off the coast.

At the southern end of the east coast, the Tasman Peninsula is a favoured tourist destination. As well as the beaches and peaceful bays, other features include: the Tasmanian Wildlife Park, The Marine Park, country clubs, host farms and one of Tasmania's prime attractions, the penal settlement of Port Arthur. Originally one of the first settlements in Australia, the ruins and restorations record the harshness and brutality of the colonial era and must be visited to be fully appreciated.

To the north of Hobart there are the historic towns of Richmond, New Norfolk, Bothwell, Oatlands, Ross and Campbell Town, and on the Central Plateau some of the best inland fishing in the world. Whether the preference is for trolling on Great Lake, spinning in tarns or fly fishing on rivers, there are three types of trout waiting to be lured—brown, rainbow and brook trout.

South of Hobart the Huon Valley and D'Entrecasteaux Channel feature peaceful pastoral land, orchards and estuaries with a backdrop of mountains. Special features include limestone caves at Hastings, Casey's working steam museum at Dover and the Hartz Mountains National Park.

Hobart, the capital, is picturesque, being situated on the shores of the Derwent River and beneath Mt Wellington. Again there is history: the port at Sullivans Cove; Salamanca Place; and Battery Point. The night life is epitomised by Australia's first casino, located at Wrest Point. Together with its recently completed convention centre and international class cabaret shows, it is a focus of excitement and enjoyment. As well, discos, hotels featuring rock bands, and wine bars are scattered throughout the city. The restaurants are of extremely high quality and the cuisine features fresh local seafood and dishes from around the world. Other cultural features include the Tasmanian Museum and Art Gallery and the many private galleries displaying some of Australia's best contemporary art and craftwork.

Tasmania's other main centre is Launceston in the north of the island. It also has a casino but, rather than in the Las Vegas style of Wrest Point, it is established as a country club. Other popular attractions are the recreated Penny Royal Watermill and Gunpowder Mill at the mouth of the spectacular Cataract Gorge, and Rutherglen with its combination of accommodation, horse-riding, zoo, water activities, outdoor and indoor sports and restaurants. Nearby National Trust houses include Clarendon, Franklin House and Entally House.

As can be seen, Tasmania is geographically diverse and has many local features well worth seeing. But there are also many facilities available at most centres such as golf courses, sporting complexes and diving, sailboard and boat hiring. With other activities such as staying on holiday farms or participating in adventure pursuit tours, there is the experience of the real Tasmania and a chance to meet the people and gain an insight into the local culture.

With the accommodation that varies from luxury suites to good, clean rooms for the economically minded, and the increasing professionalism that allows for spontaneity and flexibility in itinerary, transport, accommodation and activities, Tasmania is the ideal destination for any holiday.

### Tasmania's North-West

An extremely popular area for tourism and fly-drive holidays is the North-West of Tasmania. The area is traversed by the Bass Highway, a smooth, wide route that allows quick travel between the major coastal towns. There is also a network of high quality country roads giving easy access to the towns, villages and features further inland. Nearly every town has a camping ground, a caravan park and hotels of high standards as well as shopping and sporting facilities.

The North-West is easily accessible to the tourist with both airports at Devonport and Wynyard, only an hour's flight from Victoria. Devonport is aptly referred to as 'The Gateway to Tasmania' as it is also the major port for the Bass Strait shipping service. It is also the main city of the area.

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Set on the peaceful Mersey River, it has several large, safe sandy beaches within walking distance of its commercial centre. At the Bluff there is Tiagarra, a Museum of the Tasmanian Aboriginals, and in the surrounding parkland, aboriginal petroglyphs can be found. The Don railway takes passengers on a pleasant trip through the surrounding bushland. Manufacturing attractions include the Ovaltine factory and the National Textiles factory.

Burnie is the main industrial centre of the North-West. The largest factories are the paper producer Associated Pulp and Paper Mills, titanium producer Tioxide and cheese producer Lactos. Other attractions include the Art Gallery at the Civic Centre and the Pioneer Village Museum which is an entire village under one roof and contains more than 30 000 individual items on display.

The surrounding towns of Wynyard, Penguin and Ulverstone are all set between beaches and the particularly fertile farmland of the surrounding hills. The farmland is an attraction in itself with its extensive patchwork of rich chocolate-brown soil and variety of crops.

Inland there are a variety of natural and man-made features to be seen. The HEC has built an extensive series of dams and power stations on the Mersey and Forth rivers. One of these, Lake Barrington, will be the site of the 1990 world rowing championships. As well as scenic drives and forestry reserves, there are many well decorated limestone caves with three (King Solomon, Marakoopa and Gunns Plains) open to the public.

One of the most popular features is Cradle Mountain, whose crags and lakes form the northern end of the World Heritage Wilderness Area. There are extensive walking tracks, tame native animals and, in autumn, a beautiful display as Australia's only endemic deciduous species, the fagus, which has its leaves turn a light golden colour.

Other national parks include: the Walls of Jerusalem with its easily accessible alpine lakes and mountains; Rocky Cape with its extensive blackboy and banksia heaths; and the Asbestos Range with its extensive beaches and wildlife observation sites.

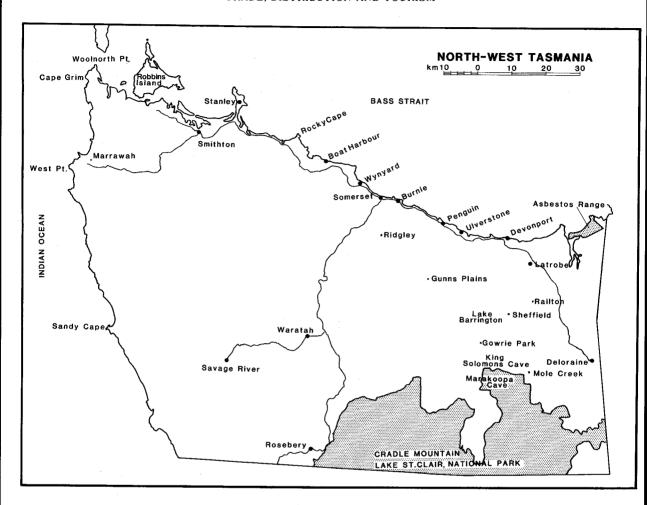
A town with an appeal all of its own is the tranquil historic village of Stanley. It is located on a narrow isthmus under a small mountain called 'The Nut' which dominates the coastline for many miles. There are many historic buildings in a unique setting. The wharves are still used by a small commercial fishing fleet, and as with much of the North-West, the waters are a bonanza for amateur fishermen of all ages. A major attraction in the first week of September is the Circular Head Arts Festival. It features: high quality woodcrafts made from local native timbers including huon pine, blackwood, celery top pine, sassafras and leatherwood; garments made of handspun wool dyed with pigments from native plants; leatherwork; and paintings.

Smithton is the main centre servicing the area west of Rocky Cape. The town's economy is based mainly on primary produce. The largest hardwood sawmill in Australia is Chatlee, the mill of Kauri Timber. Butter is produced by United Milk Tasmania and vegetables are processed by General Jones.

Marrawah, the most westerly town in Tasmania, is situated at the end of the Bass Highway. It has rich undulating farmland and wild surfing beaches. Nearby at West Point, Sandown Point and Mt Cameron West there are State Reserves to preserve middens, relics and petroglyphs of the Tasmanian Aboriginals.

'Woolnorth', a property taking up a vast area of the far North-West, has been opened up to tourists. As well as the magnificent scenery around Cape Grim and the historic buildings of 'Woolnorth', there are meals provided and educational demonstrations of farming techniques.

There are many other things to see and do in North-West Tasmania. There are forests and mountains to see, waterfalls to visit and courteous locals to meet. In all, it is the perfect location for a relaxing, safe holiday and is ideal for anyone who wants to 'get away from it all'.



### Recent Developments in Tasmania

Both government and private enterprise investment in the Tasmanian tourism industry is at a high level with many new developments in all parts of the State.

April 1984 saw the opening of one of the most important developments in recent years, the Wrest Point Convention and Entertainment Centre. With four halls and a maximum capacity for 1 600 people, it has the potential for conventions, concerts, lectures, meetings and exhibitions. International standard features include: reception, registration and full office facilities; a press gallery; broadcasting and multi-lingual facilities; a restaurant; VIP catering; and access to the Wrest Point Federal Hotel-Casino.

More recently, Federal Hotels announced an \$8 million extension to accommodation facilities at Wrest Point. Another expansion in high quality accommodation in Hobart is at Lenna where a \$3.7 million program will upgrade the existing hotel and more than double its accommodation capacity. There is also a proposal for an international hotel overlooking Hobart's waterfront, and details should be finalised during 1985.

Another major area of activity is on the West Coast where there have been several proposals for restorations of old railway lines including the Abt line which ran between Strahan and Queenstown. New tourist roads are being established between Strahan and Zeehan and south of Queenstown.

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The National Parks and Wildlife Service is busy with several projects including: continuation of restoration work at Port Arthur; upgrading of facilities at Mount William National Park; and renovation of Highfield at Stanley.

An interesting development is the success of businesses in 4-wheel drive holidays and tours along rugged bush tracks in the wilds of Tasmania. As well, there is a continual increase in the popularity of walking and trekking tours in the wilderness areas.

Visitor access to Tasmania will improve with the introduction of the passenger/vehicular ferry Abel Tasman, (see the section on 'Passenger Arrivals and Departures') and the upgrading of the Hobart Airport to take wide-bodied aircraft. In particular, the latter offers great potential for Tasmania to receive an increased share of Japanese tourists.

### The Department of Tourism

What is now the Department of Tourism originated in 1914 as a branch of the State Railway Department, and became a separate Government Department in 1934. Its primary functions are to promote Tasmania as a tourist destination and to foster the development of the State's tourist industry.

It pursues these objectives by providing tourism information and travel services; undertaking marketing activities; providing financial assistance for approved tourism development projects; establishing and maintaining standards for tourist accommodation; regulating certain road-signs in non-urban areas; and undertaking research into the development of Tasmania's tourist industry.

The Department of Tourism operates five commercial outlets in Tasmania, the Tasmanian Government Tourist Bureaux, located at Hobart, Launceston, Devonport, Burnie and Queenstown. These provide a range of tourist information and arrange transport, accommodation and other travel services within the State, interstate and overseas. Tasmanian Government Tourist Bureaux also operate in other States undertaking local promotional activities and facilitating travel to, and within Tasmania. They offer a comprehensive range of package tours organised by the Department of Tourism, Tasbureau Tours act as agents for other tour operators and the domestic airlines, and make travel arrangements tailored to individual requirements.

The mainland offices of the Tasmanian Government Tourist Bureau are located at the following addresses:

256 Collins Street MELBOURNE Victoria (Ph. 03 63 6351)

217 Queen Street BRISBANE Queensland (Ph. 07 221 2744)

32 King William Street ADELAIDE South Australia (Ph. 08 211 7411) 129 King Street SYDNEY New South Wales (Ph. 02 233 2500)

5 Canberra Savings Centre City Walk CANBERRA Australian Capital Territory (Ph. 062 47 0070)

55 William Street PERTH Western Australia (Ph. 09 321 2633)

Overseas, the Department of Tourism maintains representatives at the following locations:

15th Floor, Quay Tower Cnr Customs and Albert Streets AUCKLAND New Zealand

4th Floor, 400 Orchard Road SINGAPORE 08-02

Tasmania House
71 Armagh Street
CHRISTCHURCH New Zealand

Suite 1740, 3550 Wiltshire Boulevard LOS ANGELES California 90010 USA The Department's overseas representatives promote Tasmania as a tourist destination among travel operators arranging tourist travel to Australia.

During 1983-84, expenditure by the Department of Tourism on advertising, promotional and publicity activities amounted to \$3.0 million, a 50 per cent increase over the previous year. A further \$2.7 million was expended by members of the State's tourist industry in co-operative advertising with the Department.

Sales receipts of the Tasmanian Government Tourist Bureaux during the year totalled \$32,911,016, an increase of 13.7 per cent over the previous year. Some 72.4 per cent of sales were received through the mainland Bureaux.

The Department of Tourism encourages capital investment in tourism services and facilities by providing financial assistance to approved development proposals in the form of loans and grants from the Tourism and Recreational Development Fund and guarantees, under the *Tourism Act* 1977, in respect of commercial loans.

During 1983-84, \$687 245 was advanced from the Tourism and Recreational Development Fund, loans accounting for \$233 130 and grants for the remaining \$454 115. Although no guarantees were extended for development purposes, 51 tourism development proposals received financial assistance.

The Department of Tourism liaises with the Tasmanian Development Authority in considering applications for financial assistance and in providing information and advice to prospective developers.

### The Tasmanian Visitor Corporation Ltd

The Tasmanian Visitor Corporation came about through the amalgamation of the Tasmanian Tourist Council and the Tasmanian Visitors and Convention Bureau late in 1984, in a move to rationalise and enhance the efficiency of these two organisations.

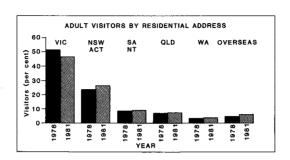
The Corporation's main objective is to represent the interests of the private sector of the tourist industry in the development of tourism in Tasmania. In liaison with the State Government and the Department of Tourism, it is responsible for promoting the conventions segment of the travel industry and for publicising the State's tourist attractions and travel facilities.

### Tasmanian Visitor Surveys

The Department of Tourism, with assistance from the ABS, conducted the first Tasmanian Visitor Survey in 1978; a second was conducted in 1981. At all Tasmanian ports of departure, interviewers spoke to a 2.6 per cent random sample of travellers who were given a questionnaire to complete. Much useful information was compiled about tourist behaviour and expenditure.

In 1981 there were 307 000 visitors who spent approximately 3.4 million visitor nights in Tasmania. Of these, 61% were male visitors and 34% were people travelling alone. Their average expenditure in Tasmania was \$571 and 57% intended to return to Tasmania.

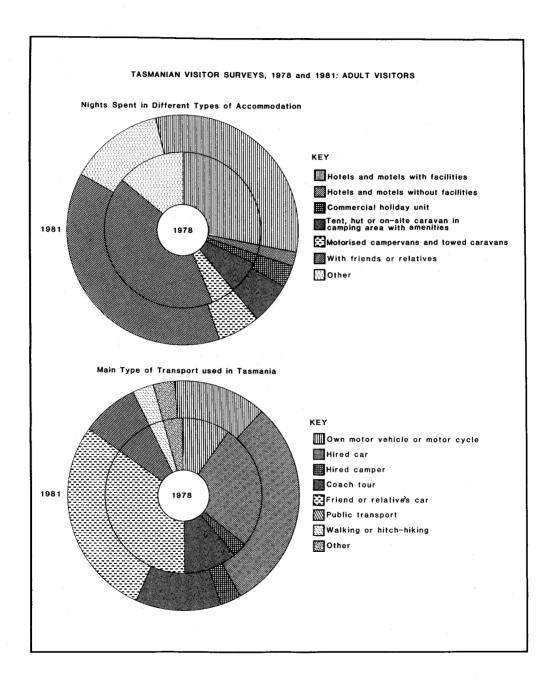
The following graph shows the percentage of adult visitors to Tasmania by State of origin for 1978 and 1981:



The following table shows the type of accommodation used, type of transport used and the types of activities in which visitors participated. More details from the surveys are available from the Department of Tourism.

Tasmanian Visitor Surveys, 1978 and 1981: Adult Visitors

Particulars	Proportion of	adult visitors
rarticulars _	1978	1981
	per cent	per cent
Nights spent in different types of accommodation—		
Hotels and motels with facilities	28	32
Hotels and motels without facilities	2	2
Commercial holiday unit	2	3
Tent, hut or on-site caravan in		
camping area with amenities	7	6
Motorised campervans and towed caravans	5	6
With friends and relatives	42	38
Other	14	13
Other	17	13
Total	100	100
Main type of transport within Tasmania—		
Own motor vehicle or motor cycle	10	13
Hired car	26	30
Hired camper	3	3
Coach tour	11	12
Friend or relative's car	35	29
Public transport	8	8
	3	
Walking or hitch-hiking	4	3
Other	4	3
Total	100	100
Participation in activities—		
Sightseeing and touring	69	67
Visiting historic sights	62	58
Visiting casino in Hobart	53	55
Bushwalking and climbing	27	22
	7	7
Sea fishing	5	
Trout angling	6	4 5
Canoeing or boating	U	3



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A third survey has been conducted in respect of 1984. The results are eagerly awaited by both government and private enterprise to detect any recent change in the nature of tourists. At the time of writing, it is expected that these results would be released in mid-1985.

### Passenger Arrivals and Departures

Interstate and New Zealand passenger arrivals and departures data are currently collected by the Tasmanian Department of Tourism. These statistics include not only the number of tourists but also the movements of resident Tasmanians and visitors travelling for reasons other than tourism, such as business. The proportion of departing passengers who were visitors was shown to be about 53 per cent in the 1981 Visitor Survey. The following persons are not included in these statistics: passengers under three years of age accompanied by an adult; passengers travelling on chartered flights with minor carriers; passengers travelling on private or VIP flights; and passengers arriving from or departing for overseas on flights other than those direct to New Zealand.

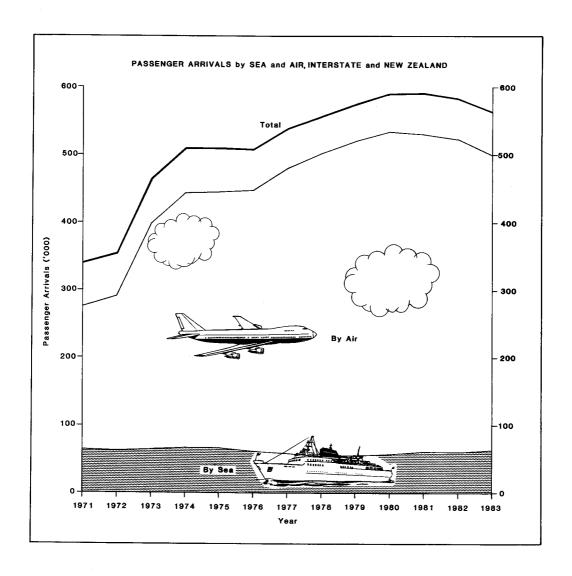
Passenger Arrivals and Departures, Interstate and New Zealand, Tasmania

		Arriv	als					
Period	Ву	air	By sea	Total	Departures			
	Interstate	New Zealand	Бу зеи	10141				
1981	. 520 601	9 762	61 336	591 699	593 780			
1982	. 516 140	6 863	60 767	583 770	588 829			
1983 1983—	. 493 075	7 004	63 587	563 666	563 554			
November	. 34 594	501	5 732	40 827	38 657			
December		675	5 841	59 977	46 562			
1984—								
January		785	5 977	65 981	82 123			
February	. 39 850	703	5 926	46 479	40 834			
March	. 40 002	733	5 679	46 414	48 404			
April	. 45 004	580	5 266	50 850	54 381			
May		488	4 353	44 513	54 519			
June		516	3 606	38 115	33 323			
July		413	2 338	31 287	33 754			
August		465	5 283	47 347	44 715			
September		728	4 884	49 388	48 938			
October		552	5 943	52 900	48 070			
November		458	5 882	44 502	42 937			
December		633	5 902	62 574	46 687			

The monthly passenger arrivals show a distinct seasonal pattern with more people arriving in summer, reaching a maximum in January, and fewer people arriving in winter, creating a minimum in July. As well, there are minor peaks in April and October.

Total annual passenger arrivals have shown an increase from 1972, reaching a maximum in 1981. The economic recession then caused a decline and by 1983 the total arrivals had declined by about five per cent. However, the most recent figures available indicate an upturn with September, October and November 1984 results above those for 1983.

One of the greatest effects on future passenger arrival figures will be the introduction of the Abel Tasman (formerly the Nils Holgersson) to the Bass Strait shipping service. It will have a capacity for 900 passengers and 400 vehicles, doubling the current passenger capacity of the Empress of Australia. The extensive facilities will include a swimming pool, disco, sauna and cinema as well as the customary bar facilities, allowing visitors to begin their holidays as soon as they leave Port Melbourne. In a full year it is expected to transport up to an additional 60 000 passengers and projected to lift total arrivals by sea to 100 000.



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A smoothed, seasonally adjusted series of passenger arrivals in Tasmania is published in the *Monthly Summary of Statistics Tasmania* (1303.6). This enables a more ready assessment of monthly trends to be made with the impact of seasonal and irregular (e.g. a transport strike) factors removed or minimised.

### **Tourist Accommodation**

A major part of tourist expenditure is on accommodation. Hence information obtained from establishments which provide accommodation for tourists will reflect tourist impact.

An accurate measure of this impact is available for hotels, motels and guest houses with facilities (see definitions below). By combining the results of the 1981 Visitor Survey and the Survey of Tourist Accommodation it can be shown that tourists were responsible for 78% of all guest nights in these establishments during 1981.

A survey of tourist accommodation has been conducted by the ABS each quarter since 1973, collecting statistics for each month in the quarter. Initially hotels, motels and guest houses with facilities and caravan parks were surveyed. Because of the growing significance of holiday units to the tourist accommodation industry, they have been included in the collection since June quarter 1982.

The following definitions apply:

Tourist Accommodation Establishment: There is no generally accepted definition of a tourist accommodation establishment but, for the purpose of the surveys, a tourist accommodation establishment has been defined as an establishment which provides accommodation of a predominantly short-term nature (i.e. for periods of less than two months) available to the general public. Note that data are collected and published for both long-term and short-term guests at these establishments.

Licensed Hotel, Licensed or Unlicensed Motel, Private Hotel or Guest House with Facilities: A tourist accommodation establishment which provides bath or shower and toilet in most guest rooms and has breakfast available for guests.

Caravan Park: A tourist accommodation establishment which provides powered sites for caravans, and toilet, shower and laundry facilities for guests.

Holiday Unit Establishment: A tourist accommodation establishment other than an hotel or motel which provides separate self-contained units (flats). Each unit must have separate sleeping, cooking, bathroom and toilet facilities. Establishments not registered as 'holiday flats' under provisions of the Tourism Act 1977 and those comprising less than five self-contained units are excluded.

The following table includes details from the survey for recent years:

Hotels and Motels, etc., Holiday Unit Establishments and Caravan Parks: Number, Capacity and Occupancy Rates, Tasmania

	Hotels and motels, etc.			Н	loliday un	iits	Caravan parks		
Year	No. of estab- lish- ments	No. of guest rooms	Room occupancy rates (per cent) (b)	No. of estab- lish- ments	No. of units	Unit occupancy rates (per cent) (b)	No. of estab- lish- ments	No. of sites and cabins (a)	Site occupancy rates (per cent) (b)
1079	122	2.622					47	3 838	52.5
1978 1979	122	3 623	73.2	••	••	••	51	4 340	55.2
	124	3 672	74.4	••	••	••			
1980	126	3 763	72.7	••			53	4 600	51.7
1981	131	3 933	68.7				54	4 951	53.0
1982	142	4 124	68.7				55	4 881	55.3
1002	142	4 248	60.2	30	408	88.5	53	4 798	53.8
1984	153	4 340	60.7	32	443	87.9	59	5 250	50.5

<sup>(</sup>a) At 31 March for each year shown. (b) At January for each year shown.

The table shows that in recent years there has been a continual build up in accommodation capacity to a record level. At the same time, there has been a decrease in room occupancy rates, the trend correlating with trends in total passenger arrivals. More recently, results for the June and September quarters 1984 show that the occupancy-rate decrease has reached a minimum with a continuing recovery anticipated on the basis of passenger arrivals data.

Occupancy rates show a marked seasonal pattern with annual maxima in January and March and a minimum in July. However, both the average occupancy rates and annual trends are not identical between the different areas of the State. Many such comparisons can be made in the following table of details for local government areas:

Hotels, Motels and Guest Houses with Facilities: Capacity and Occupancy Rates for Statistical Areas

	At.	30 Septem	ber 1984		Room o	ccupancy i	rates
Local government or	Number of	Cap	acity		March	June	September
statistical area	estab- lish- ments	Guest rooms	Bed spaces	quarter 1983	quarter 1984	quarter 1984	quarter 1984
	no.	no.	no.	per cent	per cent	per cent	per cent
Hobart	29	1 220	2 972	58.6	64.8	55.3	52.4
Glenorchy	7	170	413	40.0	42.9	37.5	33.2
Clarence	5	79	216	34.9	48.6	35.7	29.2
Remainder Hobart Stat. Div.	5	58	155	31.1	35.6	23.9	27.3
Total Hobart Stat. Div.	46	1 527	3 756	54.1	60.4	51.0	48.1
Glamorgan	6	166	556	37.7	64.3	39.5	27.5
Spring Bay	4	98	372	32.9	53.6	33.0	27.5
Tasman	4	90	263	57.6	69.6	51.7	38.0
Remainder Southern Stat. Div.	6	63	173	25.5	40.0	28.3	18.4
Total Southern Stat. Div.	20	417	1 364	39.9	59.3	30.9	28.4
Launceston	25	708	1 977	51.2	60.1	51.5	47.2
BeaconsfieldRemainder Tamar Stat.	4	62	183	33.7	46.6	43.8	37.1
Subdiv	8	285	874	52.7	59.1	48.6	47.4
Total Tamar Stat. Subdiv.	37	1 055	3 034	50.6	59.0	50.4	46.8
Total North-East Stat. Subdiv	8	203	g 585	42.5	54.4	35.6	28.0
Total Northern Stat. Div	45	1 258	3 619	49.3	58.3	48.0	43.7
Burnie	7	216	623	48.7	50.4	39.6	42.2
Devonport	9	231	636	45.4	61.5	53.0	45.0
Ulverstone	6	117	308	32.5	48.0	29.3	24.5
WynyardRemainder North-West	7	128	345	35.2	50.7	32.4	24.0
Stat. Subdiv Total North-West	3	90	234	43.3	56.4	45.4	40.4
Stat. Subdiv	32	782	2 146	42.8	54.2	41.5	37.2
Queenstown	5	208	562	50.0	61.3	49.7	41.8
Stat. Subdiv	3	102	322	52.6	65.3	41.2	26.3
div	8	310	884	50.9	62.6	46.8	36.3
Total Mersey-Lyell Stat. Div	40	1 092	3 030	44.9	56.6	43.0	37.0
Total Tasmania	151	4 294	11 769	49.0	58.7	46.9	42.1

### The Impact of Tourism on Tasmania

In terms of the industrial structure of the economy there is no identifiable sector which can be regarded as the 'tourist industry'. The difficulty is that the provision of goods and services for tourists cannot be readily distinguished from those for residents. For example, it would be expected that tourists would spend most of their money in the industries involved with retailing, transportation, accommodation, entertainment, gambling and other services, using the same businesses that many of the locals would also use. It is therefore much more meaningful to examine the 'tourist impact' on industries rather than as a separate 'tourist industry'.

Using the results from the 1981 Visitor Survey and the 1981-82 Domestic Travel Expenditure Survey by the Bureau of Industrial Economics, the Centre for Regional Economic Analysis undertook a study of the value of tourism to the Tasmanian economy. Their model allowed for leakages on imports, and included the multiplier effects of travel expenditure, i.e. the direct effect, plus the indirect and consumption induced effects.

The study found that travel expenditure within the State in 1981 had generated employment for some 16 000 persons, or 9.6 per cent of the workforce. Also, travel expenditure had made a contribution of \$245 million or 7.25 per cent to Tasmania's Gross Domestic Product in 1981, exceeding that of each of the industries of the primary sector of the economy and of the major industries in the manufacturing sector. Of this total contribution, total visitors accounted for 51.7 per cent, non-tourist visitors 19.7 per cent, Tasmanian tourists 22.6 per cent and Tasmanian non-tourists 6.0 per cent. For a ten per cent change in expenditure by both visitors and Tasmanian residents there would be a change of about 1 090 in Tasmanian employment.

### OUTDOOR RECREATION IN TASMANIA by John Hepper, Director of the recreation, tourism and land use planning consultancy firm, Hepper Marriott and Associates.

The Great Outdoors

Tasmania is a special place for enjoying the great outdoors. It is special because there are only a few areas in the world that can offer such a variety of natural environments, so close at hand. This tiny island State is full of contrasts, from the storm-battered coastline of the west to the sheltered and tranquil coves of the east; from the ancient rainforests deep in the south-west to the rich rolling pastures of the north-west; from the wild Franklin River that plunges through spectacular gorges, to those rivers like the Derwent that flow silently through the capital city; from those forests teeming with wildlife, to the Queenstown lunar-like landscape which appears devoid of any life; from the jagged peaks of the Western Arthur Range to the glacial plateau of the Central Highlands; and from the historic hamlets strung along the Midlands Highway to the bustle of urban life in larger cities. All of these unique places provide a remarkable setting for exploring the outdoors in Tasmania.

Every resident, regardless of where they live, can reach the coastline, mountains, forests or rivers without having to travel long distances. The outdoors offers the opportunity to seek a wide range of recreational values. Some people treasure the feelings of isolation, remoteness, peace and tranquility. Others may seek a challenge, or simply social contact with friends. For some it may be the chance to appreciate the wonders of the natural environment.

It is necessary to give some qualification to what is meant by the term 'outdoor recreation'. It can mean those activities that are unstructured and non-competitive, which depend upon the availability of a natural resource, and are usually undertaken by small groups. Activities such as football, tennis and golf are considered to be 'sport' rather than recreation.

Access to the outdoors is enhanced by a complex network of highways, roads, tracks and trails that cover the State. Tasmania is also fortunate to have set aside numerous parks and reserves to cater for the recreational interests of residents and visitors. The principal

land managing authorities are the National Parks and Wildlife Service and the Lands Department.

The National Parks and Wildlife Service is responsible for the management of over 100 reserves in the State. These include National Parks, State Reserves, Nature Reserves, Historic Sites, Aboriginal Sites, Conservation Areas and Game Reserves. The Lands Department has set aside over 70 reserves for use by the community. These are Protected Areas, State Recreation Areas, Coastal Reserves and River Reserves. The Department is also responsible for the management of undedicated crown lands, some of which have considerable recreational value. Black Bluff Range and the Leven Canyon in the north-west, or Friendly beaches on the East Coast are good examples.

The Forestry Commission provides land and facilities for recreation, but as a secondary role to that of managing the forests for timber production. The Commission administers over 3 500 kilometres of forest roads and has set aside over 30 small recreation reserve areas. Likewise, the Hydro-Electric Commission provides facilities at its lakes, that cater for the sightseer, picnicker, fisherman and water skier. In addition, all local councils have set aside small areas throughout the State for the public to enjoy.

Generally, the great bulk of parks and reserves cater for low impact recreation activities such as sightseeing, picnicking, beach activities, fishing, walking, nature study, and to a lesser extent camping. Activities such as canoeing, water skiing, rock climbing, snow skiing and boat cruising are provided for in some reserves. Activities with higher impacts, such as trail bike riding, four wheel driving, horse riding, hunting and orienteering are restricted to a few reserves.

The Division of Recreation focuses on the 'people' side of outdoor recreation, rather than the land management side. Their services include the general promotion of outdoor recreation, outdoor leadership training, the co-ordination of recreation planning with other government departments, local governments and community groups.

### Participation in Outdoor Recreation Activities

The following table indicates household participation in a number of outdoor recreation activities, based on a 1 per cent survey of all Tasmanian households in 1978. The pattern of results is consistent with other surveys carried out in Australia. There is high participation in family and socialising activities such as the 'Sunday' drive, picnic or trip to the beach. There is generally lower participation in those activities that require specialised and expensive equipment or involve higher risks or greater skills, such as scuba diving, rock climbing and caving.

The popularity of sightseeing is not surprising given the number of superb scenic routes within a half day trip from our larger urban centres. Outstanding scenic journeys include the drive from Table Cape to Boat Harbour, Gunns Plains at the full height of hop harvesting, the Tasman Peninsula, or the splendour of the Derwent Valley in autumn. The spectacular climb up Mt Wellington, the quaint English countryside of the Longford-Deloraine area, and the coastal views of Freycinet Peninsula are inspiring.

Household Participation in Outdoor Recreation Activities, Tasmania, 1978
Source: Tasmanian Recreation Land Use Study, Outdoor Recreation Survey April-May 1978

Outdoor recreation activities	Per cent		
Sightseeing/driving for pleasure	60		
Picnicking/barbecuing	59		
Beach activities	40		
Salt water fishing	31		
Camping/caravaning	31		
Fresh water fishing	19		
Pedal cycling	14		
Hunting	12		
Boat cruising	11		
Hiking	10		
Bushwalking	10		

Household Participation in Outdoor Recreation Activities, Tasmania, 1978
Source: Tasmanian Recreation Land Use Study, Outdoor Recreation Survey April-May 1978—continued

Outdoor recreation activities	Per cent			
Horse riding	8			
Trail bike riding	7			
Four wheel driving	4			
Trail bike riding Four wheel driving Underwater activities	5			
Field nature studies	4			
Water-skiing	4			
Canoeing	3			
Snow skiing	2			
Orienteering	2			
Air activities	2			
Rock climbing	1			
Caving, caverneering	i			
Fossicking/rock collecting	1			
Tossicking/Tock concernig	1			

Proportion of Visitors to the State undertaking Selected Outdoor Activities
Source: Department of Tourism, Tasmanian Visitor Profile: Compiled from the 1981 Survey of Visitors to

Activities	Percentage of visitors							
	1st time holidayers	Repeat holidayers	lst time guests	Repeat guests	Conven- tion	Business	Total	
Sightseeing/touring Visiting historic	91	80	88	60	56	24	66	
sights	87	70	78	44	50	18	57	
Bushwalking/climbing	30	24	42	22	11	5	22	
Fishing	. 7	7	15	15	1	3	- 8	

Tasmania is a mecca for bushwalkers. Each year thousands of people are drawn to the State to tramp through some of the most challenging and awe-inspiring country to be found. It may be the rugged traverse of the Arthur Range, the alpine track to Frenchmans Cap, and the rewards of reaching the pinnacle of Federation Peak. Bushwalkers throughout the world remember well the majestic beauty of the Southern Ranges, the overland track from Cradle Mountain to Lake St Clair, and the unforgettable river crossings on the South Coast track. Bushwalking however, is not only for the young and fit. The State is well endowed with parks and reserves that have tracks and trails to cater for everyone. The opportunity is always there for the public to go walking with commercial guides, a walking club, a community group such as scouts, family and friends, or simply with the help of a brochure.

Surveys by the Department of Tourism consistently indicate the power of our outdoors to attract visitors. The previous table shows for different categories of visitors, their involvement in some outdoor recreation activities whilst staying in the State. Bushwalking and climbing was undertaken on average by 22 per cent of all visitors to the State, and rose as high as 42 per cent for those visitors who stayed as a guest with Tasmanian residents.

The contribution of outdoor recreation to the local economy is also significant. The South-West Tasmanian Committee concluded that the direct value of bushwalking activities in south-west Tasmania alone was worth at least \$10 million per annum to the State.

Caving provides a good example of how one activity can cater for different groups within the community. There is the cave tourist who needs tour guides, paths, lighting systems and other basic facilities. Marakoopa and King Solomons caves at Mole Creek, Gunns Plains Cave and the Newdegate Cave at Hastings Cave State Reserve, all cater well for this market. In fact over 50 000 visitors each year make their way 'down under'.

In contrast there is the intrepid sporting caver ready to plummet 320 metres down Anne-a-Kananda Cave on the north-east side of Mt Anne or discover the hidden chambers of one of Australia's 'richest' caves, Kubla Khan in the Mole Creek area. In between are a wide range of different user groups, the casual caver, club member, outdoor adventurer, photographer, school party, or scientist, all with different interests and skills.

Four wheel drive tours exemplify the successful marriage between outdoor recreation and tourism. This market has grown because of the entrepreneur's ability to perceive and respond to new market needs. The publicity given in recent years to Tasmania's unique wilderness areas has also encouraged people to experience Tasmania's wild areas for themselves. Currently, commercial tour companies are offering day and week tours to areas such as the Arve Valley, Styx and Florentine Rivers, the World Heritage Area, the West Coast, the North Eastern Highlands and the Central Plateau.

The use of the outdoors also brings with it a host of land use problems which land managers and users must strive to resolve. If not, the value of the recreation resource will be degraded, as will the quality of the recreation experience.

### Outdoor Recreation Problems

Too often only the appealing virtues of tourism and recreation activities are considered, whilst associated problems are forgotten.

Firstly, our land and to some extent water resources are finite, limited in their capacity to carry and accommodate recreation activities. Poor planning can lead to management problems. These include the erosion of tracks, fire escape into surrounding lands, vandalism of facilities or the spread of deadly diseases such as phytophthora cinnamoni which leads to the dieback of our forests. A build-up of litter from those who are too lazy to take home litter is also a major problem. This all leads to a loss of quality, in the recreation experience, for those that seek to enjoy the area later.

Secondly, specific problems hinder the full enjoyment of an activity. These problems could stem from the lack of land available for an activity, from the impact of adjacent land uses or from conflict with other land users. There are also problems with access, lack of information and poor communication with land agencies. The lack of proper facilities, vandalism and pollution also spoil the experience.

Land managers generally find themselves in an unenviable position, on the one hand trying to respond to the needs of the user, on the other trying to protect the value of the recreational resource for future generations. Unfortunately, governments and local councils of the day have not given outdoor recreation the priority it deserves and often see more votes in funding elite sport. There is an urgent need to improve the resources of land managers so they may plan more effectively for recreational use. The problem signs are clearly evident. There is a lack of management plans to cover most State land areas, few field staff, poor facilities and growing damage to fragile environments.

Fourthly, and related to the above three problems, is the lack of a co-ordinated approach to land use planning in the State. There are a multitude of government departments and authorities, councils and other groups with a 'finger' in the 'pie' making decisions about the recreational use of land. Too often the recreational values of an area are not fully assessed in the land use decision-making process. Without co-ordination, the opportunity exists to have greater conflict between different activities, duplication of recreation facilities and an inefficient use of public and private moneys. During the period 1978-1983, Tasmania, through the efforts of the Tasmanian Recreation Land Use Study, led Australia in the establishment of co-operative and ongoing recreation planning. Despite its many achievements, the State Government has now allowed the funding to lapse.

A fifth problem, is the lack of an adequate information base for outdoor recreation planning. There is very little information, both of a quantitative and qualitative nature concerning visitor use of State land areas.

Lastly, much of today's planning practices can be considered outdated and limited in their ability to respond to the future recreational needs of the community. There is considerable potential to adopt more creative and innovative planning approaches that are concerned with the quality of the recreational experience.

### Quality Recreation Experiences

There are a number of different but inter-related phases that combine to make up the total outdoor experience. Firstly, there is the anticipation phase where people gather information, contemplate various options and prepare the trip. Next there is the travel-to phase involving movement from one destination to another. This is followed by the on-site experience where the principal outdoor activity is usually carried out. The travel-back phase can be different from the travel-to journey. Finally there is the recollection phase, where people recall those vivid memories of the views of their trip. More attention should be paid towards the enhancement of the total experience, rather than devoting all attention to the on-site facilities.

Quality outdoor recreation experiences are best assured through the provision of a diversity of recreational opportunities for the community. The combination of different recreational settings, activities and experiences ensures planning to meet the interests of different users. For instance, there is a 'standard' look about many of the picnic facilities provided in the State — standard in their design, location, capacity, construction quality and above all, 'standard' in the experience they offer the user.

Improved recreation planning would see improvements in the quality of the recreational experience. A greater range of facilities would be able to cater for those who wanted a picnic in a 'developed' setting where they share the facilities with many others. Others could escape the crowds and accept more basic facilities in a 'natural' setting. In between there can be any number of possible combinations that vary in terms of access, the level and quality of facilities, commercial services, social and management conditions. In short, the planning approach recognises that the users' needs and the providers' responsibilities are not static but are constantly changing.

Changing attitudes to the environment, increased leisure time, and the impact of rising fuel costs affect the pattern of outdoor recreation participation. If planning is to be effective then the planning process must identify and accommodate these value changes.

The success in recreation planning should not be measured by the number of vehicles through the gate or by tickets sold, but rather by the quality of the recreational experience of the visitor.

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# **CHAPTER 17**

# TRANSPORT AND COMMUNICATION

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# Chapter 17

# TRANSPORT AND COMMUNICATION

### PORT AUTHORITIES

#### Introduction

Tasmania has a number of ports capable of accommodating overseas vessels; they are sited on the Derwent and Huon Rivers in the south (Hobart and Port Huon); in Spring Bay on the east coast; on the river Tamar in the north (Inspection Head, Long Reach and Bell Bay); on the Mersey River (Devonport), in Emu Bay (Burnie) and at Port Latta, all in the north-west. All these ports provide depths of approximately nine metres or more of water at berths; Port Latta provides a depth of 16 metres nearly one and a half kilometres off-shore.

Interstate and intrastate trade passes through the main ports and operates as well through ports at Strahan, Stanley, Ulverstone, Currie (on King Island) and Lady Barron (on Flinders Island).

This section deals primarily with the authorities which control the harbours but a brief description is given of the main ports.

### Port of Hobart

### Location

The approach to the Derwent and the Port of Hobart is made through a very wide strait between Cape Queen Elizabeth (Bruny Island) and Cape Raoul (Tasman Peninsula), approximately 50 kilometres south-east of the city. The mouth of the Derwent, five and a half kilometres wide, lies 19 kilometres south-east of the port which is built upstream on the western bank in a sheltered cove; the opposite bank lies two and a half kilometres away to the east. The shores of the Derwent and the arms of the cove act as natural breakwaters.

# Description

The present main port is situated in the Sullivan's Cove and Macquarie Point area. Sullivan's Cove is U-shaped with 610 metres separating the southern and northern arms. The southern area is devoted to Princes Wharf with berths numbered one to four although No. Four is now occupied by the CSIRO. Between Nos. 1 and 2 is Princes Intermediate, the bulk grain berth. The centre of the cove contains Elizabeth Street Pier, while the northern area is made up of Macquarie Berths No. 1, 2, 3 and 4. Turning up river from the outer end of Macquarie Berth No. 4, the area known as Macquarie Point has been developed to provide the port with two additional roll-on roll-off (ro-ro) berths and one container/general cargo berth. This area has now become the major centre of port activity, and has been provided with modern cargo handling equipment, including a 254-tonne fully mobile crane, suitable for handling containers. The two roll-on roll-off berths are operated by the Union Steamship Company's 'Seaway' interstate service, connecting Hobart with Melbourne and Sydney. The third new berth is 224 metres long and is capable of accommodating the largest general cargo carriers in service. Adjacent to these new berths is 8.4 hectares of sealed cargo area, three large all weather cargo sheds, a dual rail spur connecting into the State's main rail system and adequate holding points for refrigerated containers.

The most striking feature of the Port of Hobart is the ease with which large vessels can be brought to berth. Tides present no problem, the maximum rise and fall being 1.37 metres (average approximately 0.61 metres), and dredging of approach channels has never been necessary.

# Subsidiary Ports

In addition to the main port in the heart of the city, there are a number of subsidiary outlets serving the south of the State. Based on the Huon River (at Hospital Bay) is the APM Ltd private wharf (for export of paper pulp) and at the Port of Spring Bay near Triabunna on the east coast, accommodation has been provided for bulk carriers loading woodchips for Japan. In the Derwent itself, four kilometres upstream from the main port, is a tanker berth at Selfs Point where bulk petrol and oil are stored; tankers pass under the 47-metre high navigation span of the Tasman Bridge on their way to Selfs Point.

The Selfs Point area has been developed as a petroleum products storage area and one and a half kilometres upstream from Selfs Point, is the Electrolytic Zinc Company Ltd private wharf at Risdon. At Boyer, located nearly 32 kilometres upstream from the main port, is the Australian Newsprint Mills Ltd plant. Newsprint is transported to the main port by rail.

### Administration

The Marine Board of Hobart is the authority controlling the main ports of Hobart, Strahan, and the Port of Spring Bay. The Board's jurisdiction covers the west, south and east coasts of Tasmania between the parallel of 41½° south latitude and Cape Portland.

### Port of Launceston

### Location

The Port of Launceston is situated on the River Tamar, which originates at the confluence of the North Esk and South Esk Rivers at the City of Launceston and flows 60 kilometres to Bass Strait where deep water and broad expanses of river provide a valuable natural harbour. In this area, encompassing Bell Bay, Inspection Head and Long Reach, are located the major activities of the Port of Launceston. A tidal range of up to 3.6 metres creates strong tidal currents, which by natural scour eliminate the need for any maintenance dredging in the lower reaches of the river.

Because extensive areas of deep water frontage are available, the development of the port is decentralised with the main operations located as follows:

- Bell Bay: The Bell Bay site is on the eastern shore, some 13 kilometres upstream from the mouth of the Tamar. The Bell Bay and Long Reach areas are linked to the railway system. Wharves include the Comalco Aluminium Bulk Berth, the ANL Melbourne/Sydney roll-on roll-off/lift-on lift-off Cargo Terminal, the PLA Bulk and General Berth, the PLA tanker berth and the PLA Common User Berth general cargo berth. The port has large, modern cold store facilities, stock-yards and white and black oil and LP gas storage tanks.
- Long Reach: Port facilities have been developed upstream from Bell Bay, mainly for the export of woodchips from adjacent plants. There is also a tanker berth at the HEC thermal power station.
- Inspection Head: Overseas berths are situated on the western bank, opposite Bell Bay, for shipment of wheat and general cargo. Bulk storage and special loading facilities for tallow are also provided.
- Kings Wharf, Launceston: Includes berths for intrastate trade; facilities also include a graving dock and shiplift and fitting-out berths for docking and repair of vessels up to 2 200 tonnes.

# Description

All berths and facilities now in service in the port have been constructed since about 1950. Channel and lighting improvements in the lower reaches have been carried out over

recent years, permitting vessels drawing up to 11.1 metres to work the river for 16 kilometres from Bass Strait to the site of the woodchip berths in Long Reach. The channel improvement works were designed to provide for the rapidly growing industrial complex at Bell Bay which is creating an ever increasing demand for large bulk carriers.

### Administration

The port is administered by the Port of Launceston authority whose jurisdiction covers the full length of the river Tamar, together with the northern coastline westward to Badger Head and eastward to Cape Portland and one league (three nautical miles) to seaward.

# Port of Devonport Authority

### Location

The port of Devonport is situated on the Mersey River within two kilometres of the coast. The entrance is sheltered by Mersey Bluff on the west and by a retaining wall extending over half a kilometre northward from the eastern shore of the river. The river was always a natural harbour for small craft and its development as a major port by extensive dredging and engineering works has resulted in a secure harbour for large ships.

### Description

The main harbour is formed around two turning basins, each 259 metres in diameter with wharves on both banks providing 1 067 lineal metres of berthage.

The western berths contain four general berths and one specialised berth. The general berths are provided with storage sheds, oil pipelines for fuel discharges, wheat silos, bulk cement silos and bulk tallow silos, as well as one of the largest and most modern cold storage facilities in the State. The specialised berth is for the import of LPG and serves a 4 000 tonne tank depot immediately adjacent to the berth. The berthing jetty is also adapted to handle intrastate traffic of stock from the Bass Strait Islands. Provision has been made for the handling of bulk commodities and heavy lifts while all berths are connected to the railway network.

Two terminals for roll-on roll-off and container cargo are located on the eastern bank; one is leased to the State Transport Commission and the other is a common-user facility. Both are equipped with stern loading ramps and cranes for lift-on lift-off cargo. Extensive vehicle marshalling and cargo assembly areas are provided, with land available for expansion. Both major unitised and container operating berths are fully equipped with power points for refrigerated containers.

One roll-on berth leased to the State Transport Commission was adapted to cater for the new passenger vessel Abel Tasman which replaced the Australian National Line's Empress of Australia in mid-1985. The vessel will cater for up to 200 000 passengers per year and 47 000 cars which is a substantial increase on the previous vessel. This berth now becomes specialised for tourist traffic and pure ro-ro cargo.

General interstate cargoes will now be handled through the second container berth by the *Mary Holyman* operating on an alternative service between Melbourne, Adelaide and Devonport. This service replaces the previous Bass Strait operations to the port provided by the Australian National Line vessels.

### Administration

Since March 1982 the Authority has assumed responsibility for the Devonport Airport under the Commonwealth Airport Local Ownership Plan. The Airport has been reconstructed by the Authority from Commonwealth grants of \$7 million to medium jet standard.

### Port of Burnie

### Location

The ports of Hobart, Launceston and Devonport all lie within the shelter of rivers but the Port of Burnie, on Emu Bay, was built out into the open sea in the lee of Blackman Point. Protection from the potentially rough seas of Bass Strait is afforded by two large breakwaters. Burnie is a deep-water port with no tidal restrictions, except occasionally for the larger vessels, and is virtually fog-free. It is in operation 24 hours every day, and vessels can be at full speed 20 minutes after departure. All wharves are connected to the State railway system.

# Description

The shelter necessary for all-weather use of the port is provided by a 380-metre breakwater extending from Blackman Point in a south-easterly direction. The wharves are thus protected by the point and by the breakwater from swells coming in from the west or north, the two quarters from which heavy seas are feared. Ocean Wharf is constructed immediately in the lee of the breakwater, the two structures appearing as one. Other berths are provided by piers basically parallel to the breakwater but lying further south.

An island breakwater sited north-east from the end of Ocean Wharf and consisting of concrete caissons 488 metres long, is orientated south-east and is calculated to give ample protection for up to 610 metres of berthage south of existing piers. An interesting feature is the use of the lee of the island breakwater for a tanker berth for both petroleum and sulphuric acid. The fuel and the sulphuric acid is pumped from the berth over a bridge spanning the gap between the two breakwaters.

A modern roll-on roll-off cargo terminal handles general cargo shipped by Australian National Line vessels servicing Melbourne, Sydney, Fremantle and Queensland ports. The terminal is equipped with a 50 tonne container handling crane. A regular monthly service to West Australia is provided by West Australia Stateships.

Burnie has five other berths in regular use. Ocean Wharf and North McGaw are conventional berths used for general cargo. South McGaw Pier is equipped with one 12-tonne and one 28-tonne crane. Jones Pier North is a bulk cargo berth, capable of handling vessels up to 250 metres in length and 10.0 metres draft. It is traversed by a conveyor loader, owned by the Emu Bay Railway Company Ltd, with a loading rate of 1 270 tonnes per hour. It handles zinc, lead and copper concentrates from the west coast mines. Jones Pier South is the port's major general cargo berth, used by quarter ramp ro-ro vessels, and cellular container vessels. It has two large sheds, incorporating a cold store. A twin lift 65 tonne Paceco Portainer crane is presently being erected on this berth and, at time of writing, is expected to be in operation in June 1985. A bulk tallow installation services both North and South Berths. A 1.4 hectare area in the northern section of the port was cleared in preparation for a ro-ro shipping service by Brambles which commenced operating in March 1985. The service provides three sailings a week to Melbourne and the vessel uses the North McGaw berth and ramp.

In recent years Burnie has emerged as Tasmania's international general cargo port with regular services to Europe, the Middle East, South Africa, South-East Asia, the Far East and the West Coast of North America.

### Circular Head (Port Latta)

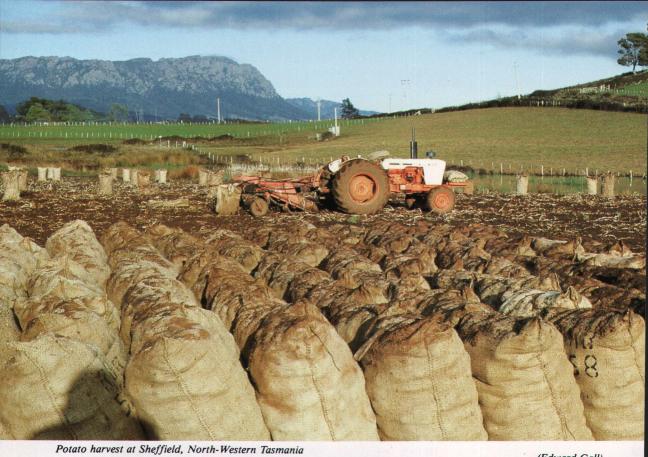
A deep-water offshore terminal, capable of accommodating bulk ore carriers, has been constructed at Port Latta for the export of iron ore pellets to Japan. The loading facility consists of a 1.2 metre wide conveyor belt which carries pellets to two swivel loaders located 1.6 kilometres offshore. Vessels moor in 15.8 metres of water to take on pellets, the system having a discharge capacity of about 3 050 tonnes per hour.



Irrigation system near Frankford, Northern Tasmania
Sheep grazing on lush farmland near Don, North-Western Tasmania

(Edward Gall)



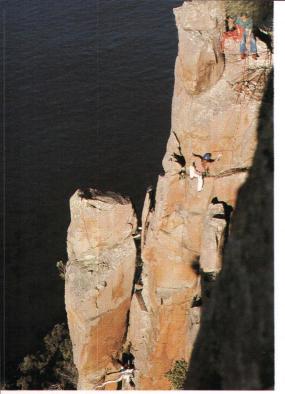


Potato harvest at Sheffield, North-Western Tasmania

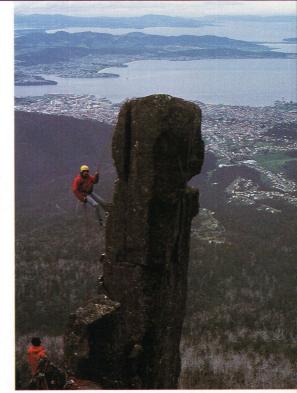
Oil poppies, North-Western Tasmania

(Edward Gall)



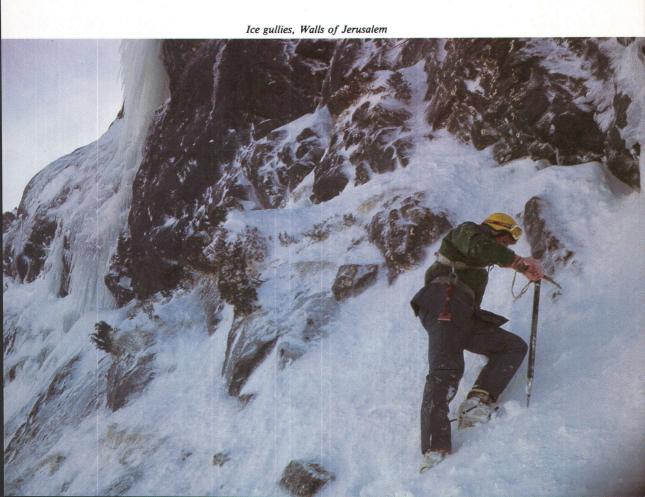


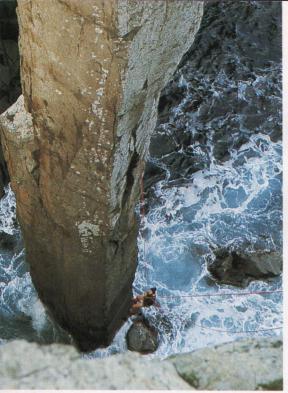
Fluted Cape, Bruny Island (over 250m pillar)



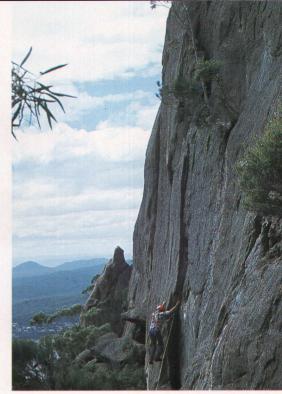
Climbers descending dolerite pinnacle, Mt. Wellington

(Reg Marron)





Winter ascent of Totem Pole, Cape Huay, Tasman Peninsula



Climbing on The Hazards (granite), Coles Bay

(Reg Marron)

Climbing on The Pavilion, Ben Lomond



### Constitution of Port Authorities

# Election of Wardens

The present system of choosing port authority wardens is summarised in the following table:

Port	Authorities:	Flection	ωf	Wordone
ron	AUTHORITIES:	riection	OI	wardens

Authority	Number of wardens	System of election of wardens
Hobart Marine Board	9	Special electorate of ship-owners, importers and exporters
Port of Launceston Authority	5	Electors of Launceston, Beaconsfield and George Town as for local government elections
Burnie Marine Board	9 ]	***************************************
Port of Devonport Authority  Circular Head Marine Board	11 }	Municipal electors within proclaimed area
King Island Marine BoardFlinders Island Marine Board	5 }	Appointed by the Government

# Boards of Hobart and Launceston

The wardens of the Hobart Marine Board are elected by a special electorate of shipowners, importers and exporters. The number of votes that each importer and exporter may exercise is proportional to the value of goods he imports or exports, while ship-owners' voting rights are proportional to the tonnage of their vessels. Three wardens retire each year; the Master Warden is elected by Board members annually.

In the case of the Port of Launceston Authority, marine board electors are those qualified to vote at elections for aldermen of the City of Launceston or for councillors of the municipalities of Beaconsfield and George Town.

### Navigation and Survey Authority of Tasmania

The Authority was constituted in 1963 to implement sections of the *Marine Act* 1976 relating to the safety of life and property at sea. Member marine boards contribute equally to the costs of running the Authority; the income is derived from survey and service fees.

# Finances of Port Authorities

The following table gives details of revenue and expenditure for each port authority in 1982-83:

Port Authorities Receipts and Expenditure: All Funds, 1982-83 (\$'000)

			Auth	ority				
Particulars	Hobart	Laun- ceston	Devon- port	Burnie	Circ- ular Head	King Island	Flind- ers Island	Total
			Revenue	e Funds				
Receipts—								
Wharfage charges. Other service	2 933	3 010	2 017	2 566	236	164	24	10 950
charges	2 096	3 644	3 149	1 207	100	55	9	10 260
Plant hire	488	590	420	421	21	11	8	1 959
Government grants	_	_			70	27		97
Other (a)	888	430	796	384	12	14	34	2 558
Total	6 405	7 674	6 382	4 578	439	271	75	25 824

continued next page

### TRANSPORT AND COMMUNICATION

# Port Authorities Receipts and Expenditure: All Funds, 1982-83 (\$'000)—continued

			Auth	ority				
Particulars	Hobart	Laun- ceston	Devon- port	Burnie	Circ- ular Head	King Island	Flind- ers Island	Total
			Revenu	e Funds				
D (41)								
Payments (b)— Administration Debt charges—	689	1 129	464	668	32	90	3	3 075
Interest	937	1 131	607	1 602	64	3	11	4 355
contributions	803	499	352	663	55	10	8	2 390
Works and services	2 554	4 079	2 917	1 645	165	158	65	11 583
Other	406	651	335	67	30	28	8	1 525
Total	5 389	7 489	4 675	4 645	346	289	95	22 928
			Loan	Funds				
Receipts, loan							······································	
raisings, etc	697	1 551	1 300	1 528	6			5 082
Payments (c)	782	1 849	7 907	3 484	6	_	_	14 028

<sup>(</sup>a) Includes interest receipts, sundry licences, fines and discounts received.

The principal sources of revenue of the port authorities are shipping tonnage rates and import and export wharfage rates; other sources are charges for pilotage services and the hiring of equipment. Expenditure is summarised under the heading 'works and services' which includes the provision of ordinary port services (e.g. pilotage, tug assistance, etc.), the maintenance of the port (e.g. dredging, etc.) and the improvement of the port (e.g. new wharves, new berths, etc.). To raise the additional funds required to finance port improvements, the authorities borrow money subject to State Treasury approval, the Treasury acting on behalf of the Australian Loan Council.

The next table summarises the transactions of all port authorities for recent years:

Port Authorities: Tasmania Receipts and Expenditure: Summary (\$'000)

Particulars	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83					
Revenue Funds											
Receipts—											
Wharfage charges	7 466	8 235	9 111	9 950	10 823	10 950					
Other service charges	6 802	6 830	8 343	8 968	9 906	10 260					
Plant hire	2 213	2 305	2 251	2 583	2 356	1 959					
Government grants	32	117	114	137		r 97					
Other (a)	1 559	1 134	2 084	1 200	1 944	r 2 558					
Total	18 072	18 621	21 902	22 839	25 029	r 25 824					

continued next page

<sup>(</sup>b) Excludes amounts applied from reserves for capital purposes.

<sup>(</sup>c) Includes amounts applied from reserves for capital purposes.

### Port Authorities: Tasmania Receipts and Expenditure: Summary (\$'000)—continued

	,					
Particulars	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83
Payments (b)—						
Administration	1 939	2 086	2 207	2 611	2 978	3 075
Debt charges—						
Interest	3 129	3 531	4 480	4 1 3 9	4 058	4 355
Redemption and sinking						
fund contributions	2 452	2 193	2 143	2 098	2 233	2 390
Works and services	7 891	7 351	8 778	10 590	11 256	11 583
Other	1 354	1 884	3 101	3 220	1 009	1 525
3414		1001	3 101			
Total	16 765	17 046	20 709	22 657	21 534	22 928
		Loan Fur	nds			
Receipts—						
Loan raisings	3 880	2 280	2 700	6 474	2 500	2 940
Other	303	394	532	1 100	1 166	r 2 142
Total	4 183	2 674	3 232	7 574	3 666	r 5 082
Payments (c)	4 597	3 522	6 196	8 120	4 990	r 14 028

- (a) Includes interest receipts, sundry licences, fines and discounts received.
- (b) Excludes amounts applied from reserves for capital purposes.
- (c) Includes amounts applied from reserves for capital purposes.

The following table gives the loan debts of port authorities at the end of each financial year for recent years:

Port Authorities, Tasmania Loan Debt of Principal Authorities at End of Year (\$'000)

Authority	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83
Hobart	13 333	12 616	11 888	11 097	10 487	9 684
Launceston	9 936	10 094	11 055	11 820	12 013	12 145
Devonport	8 737	9 093	8 821	9 027	9 318	10 242
Burnie	13 280	13 871	14 933	15 480	16 259	16 787
Other	1 296	1 368	1 205	1 145	1 068	r(a)1051
Total	46 582	47 042	47 904	48 567	49 146	r 49 909

<sup>(</sup>a) Comprised: Circular Head, \$781 000; Flinders Island, \$166 000; King Island \$104 000.

The next table summarises annual borrowings, aggregate debt and the provision for loan redemption for recent years:

Port Authorities, Tasmania Loan Raisings: Loan Debt and Provisions for Redemption (\$'000)

		(+/				
Particulars	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83
Loan raisings during year (a) Loan debt at 30 June	3 880 46 582	2 280 47 042	2 700 47 904	6 474 48 567	2 500 49 146	2 940 r 49 909
Provisions for loan redemption at 30 June (b)	1 943	2 392	2 333	2 562	2 854	3 195

- (a) No loans were raised from the State Government during the period covered by the table.
- (b) Balance of sinking funds and loan redemption provision accounts at end of year.

### TRANSPORT TASMANIA

In 1981 the Parliament of Tasmania passed the *Transport Act* 1981 which repealed the *Transport Act* 1938, abolished 'The Transport Commission' constituted thereunder, and empowered the Governor to appoint a Commissioner for Transport incorporated as a corporation sole with the corporate name 'Transport Commission'.

The Act provides that in the exercise of its powers, and in the performance of its functions, the Commission is subject to ministerial control except in the issue of any licence under the *Traffic Act* 1925.

The Act provides that the Commissioner for Transport and all persons employed under that Act, together with the Administrator of Road Transport appointed under the *Traffic Act* 1925, shall constitute a body known as the Transport Department. The Department is generally known as Transport Tasmania.

# Powers of Transport Tasmania

The powers can be summarised thus:

• the regulation and control of Tasmania's road, water and intrastate air transport (other than MTT bus services);

 to enter into contracts for the carrying on and maintenance of intrastate transport services;

 the commercial manufacture, maintenance, repair and sale of light engineering products;

 to refund, adjust or exempt prescribed payments or obligations, including motor tax;

to co-ordinate and improve intrastate transport services and facilities;

to operate and conduct intra and interstate shipping services.

### **Functions of Transport Tasmania**

The main functions can be summarised as follows:

to devise, initiate and carry out measures for the co-ordination, improvement and economic operation of the means of, and facilities for transport in Tasmania other than rail transport and MTT bus services, to ensure the provision of adequate transport services for the public, and to administer the *Traffic Act* 1925.

In essence this means:

- administration of the Traffic Act and regulations concerning traffic control and facilities;
- traffic engineering associated with the control of traffic;

• registration and taxation of motor vehicles;

• regulation and licensing of commercial goods vehicles;

regulation and licensing of taxi and hire cars;

regulation and licensing of privately operated coach and omnibus services;

testing and licensing of drivers of motor vehicles;

• operation of a State-owned shipping service between Stanley/King Island/Melbourne;

operation of the Bruny Island ferry service;

- administration of aerodromes under the control of the State Government;
- operation of the Australian Standard 1822 engineering workshop in Launceston known as PTA Engineering;
- traffic related research and economic studies and urban transport coordination support;
- provision of road safety policy advice and 'in the field' road safety support throughout the State;
- provide motor vehicle design advice.

# Transport Department Shipping Services

The Transport Department operates a coastal shipping service between King Island, Stanley and Melbourne and a vehicular ferry service to Bruny Island. During 1983-84 the coastal service was operated by the *Straitsman*. In that year the shipping services carried 28 835 sheep, 15 348 cattle, 289 pigs, and 79 374 tonnes of general cargo. A total of 314 voyages provided essential services to and from King Island and between Stanley and Melbourne.

On the Bruny Island service the *Harry O'May* is the primary vessel backed up by the ferry *Mangana*.

The construction of new terminals at Kettering on the Tasmanian mainland and Roberts Point on Bruny Island was completed and came into operation in June 1983. The crossing is now much shorter allowing for more frequent sailings.

### **Financial Operations**

### Annual Loss

In 1968-69 and earlier years the Commission received two grants from Consolidated Revenue, reimbursement of the previous year's loss; and a grant equal to State Land Tax collections. From 1969-70, the loss incurred by the Commission for the previous year has been reimbursed by a single grant from Consolidated Revenue.

Profit and Loss

Transport Department, Tasmania: Trading and Profit and Loss Account (\$'000)

		,			
Particulars	1979-80	1980-81	1981-82	1982-83	1983-84
		Revenue			
Coastal shipping	2 696	3 338	4 213	4 502	4 804
Bruny Island ferry	102	152	280	212	248
Tool annexe	1 491	1 871	2 144	2 218	1 672
Other revenue	760	728	954	1 208	1 342
Net loss (a)	4 338	4 690	4 289	5 475	6 419
Total	9 386	10 778	11 880	13 615	14 485
	Е	xpenditure			
Coastal shipping	3 624	3 889	4 385	5 139	5 603
Bruny Island ferry	736	762	852	970	870
Tool annexe	1 809	2 169	2 447	3 146	2 920
General expenditure	3 216	3 959	4 196	4 361	5 092
Total	9 386	10 778	11 880	13 615	14 485

<sup>(</sup>a) To be charged against Consolidated Revenue in the following year.

The remaining transactions can be summarised as follows (road safety accounts are excluded):

Transport Department, Tasmania: Motor Taxation Collection, Licensing, etc. (\$'000)

Particulars	1980-81	1981-82	1982-83	1983-84
Rev	enue			
Motor tax	18 302	18 512	17 025	17 391
Public vehicle licensing, fees, etc.	658	287	245	278
Registration, licences, etc.	5 326	7 666	(a) 7 098	7 582
Refunds of stamp duty	- 11	- 11	- 34	- 44
Stamp duty on vehicle registrations	5 891	7 927	(b) 9 999	11 796
Contributions—Motor Accident Insurance Board	330	408	497	547
Transfers from Consolidated Revenue—				
Road transport administration	2 185	2 447	2 592	2 911
Traffic engineering section	1 216	1 380	930	942
Total	33 897	38 615	38 353	41 403

continued next page

Transport Department,	Tasmania:	Motor	Taxation	Collection,	Licensing,	etc.
	(\$'000	0)—con	tinued			

Particulars	1980-81	1981-82	1982-83	1983-84			
Expenditure							
Profit and loss account (transfers) (c)	120	135	130	135			
Paid to Consolidated Revenue	30 046	34 245	34 202	36 845			
Administration, traffic control, etc.	3 743	4 220	4 046	4 412			
Total	33 908	38 600	38 378	41 392			

- (a) Includes a fire levy of \$1 461 381 which is included in the fee for registration and renewals of vehicles (other than motor cycles).
- (b) Includes \$564 831 stamp duty on premiums due to the Motor Accidents Insurance Board payable to the Transport Department as from 1 July 1981.
- (c) Receipts from public vehicle licensing paid into profit and loss account.

### RAILWAYS

#### General

Tasmania has a 1 067-millimetre gauge government railway system based on a route network of 864 kilometres. A private railway of 134 kilometres is operated by the Emu Bay Railway Company Ltd between Burnie and Melba Siding (19 kilometres south of Rosebery).

The first Tasmanian railway was the 72 kilometre Deloraine to Launceston line opened in 1871. A 196 kilometre line from Hobart to Western Junction began operating in 1876. (For a brief historical account of the development of the Tasmanian railway system see this section of the 1977 Year Book. Chapter 1 of the same edition includes an article on the construction of the main line railway from Hobart to Launceston.)

### Commonwealth Takeover

Following negotiations with the Commonwealth Government, the State Government passed the *Railways (Transfer to Commonwealth) Act* 1975 which provided for the transfer of control of the State's railway system to the Commonwealth Government with effect from 1 July 1975.

Under the agreement the State retained the following rights: to consult with the Commonwealth Government on any proposals to increase freight rates; to dispute the abolition of any service where, in the opinion of the State Government, that service is desirable; and to consult with the Commonwealth Government on the operation of new or existing railways which are of particular concern to the State. The State was also granted representation on the Australian National Railways Commission and the Australian Shipping Commission for an initial period of five years.

### METROPOLITAN TRANSPORT TRUST

The Metropolitan Transport Trust was established as a statutory authority in December 1954 to provide a system of public transport by road within the metropolitan areas of Hobart and Launceston. The *Metropolitan Transport Act* 1954, constituted the Trust and vested in it, the urban public transport systems, formerly operated by the Hobart and Launceston City Councils. In 1959 the MTT commenced operations in the Burnie municipality.

The Trust's statutory areas of operation are: within a radius of 22 kilometres of the General Post Office, Hobart; 11 kilometres of the Launceston Post Office; and such areas considered necessary so as to provide an urban bus service within the best interests of residents of the Burnie municipality.

At the time the Trust was established, major portions of the tramway systems operating in Hobart and Launceston were being replaced with electric trolley buses. The last tramway service closed down was in Hobart in October 1960. The trolley buses were eventually phased out by 1968 in favour of the more versatile motor bus.

The present MTT service is based entirely on motor buses. As at 30 June 1984 the Trust operated a fleet of 281 buses of which 203 were located in Hobart, 56 in Launceston and 22 in Burnie. Construction of a new bus depot and bus to bus passenger interchange on land owned by the Trust at Springfield in Hobart was completed in 1985.

The number of passenger journeys increased in the financial years 1982-83 and 1983-84 with the introduction of additional concession fares schemes and the retention of existing fare levels. In previous years there had been a continuing decline in passenger journeys attributed to the increased use of the private motor car. Promotion of family weekend shopping in the city and suburban areas in recent years has also affected the frequency of passenger travel.

# Financial Operations of the Trust

The following table shows the income and expenditure of the Metropolitan Transport Trust for recent years:

### Metropolitan Transport Trust, Tasmania Income and Expenditure (\$'000)

	(4)	000)			
Particulars	1979-80	1980-81	1981-82	1982-83	1983-84
	Inc	ome			
Traffic operations Other earnings Subsidy, State Government	3 988 195 7 200	4 713 183 8 390	5 416 210 8 787	5 438 272 9 755	5 368 273 11 179
Total	11 383	13 286	14 413	15 465	16 820
	Expe	nditure			
Traffic operations Vehicle maintenance Power and fuel Plant and property maintenance Administration and general Debt charges Depreciation charges	5 435 1 976 872 224 1 855 304 634	6 131 2 390 1 179 259 2 456 338 706	6 259 2 882 1 218 285 2 713 365 802	6 520 3 115 1 425 363 2 835 395 800	7 127 3 648 1 545 330 2 841 418 806
Total	11 300	13 459	14 524	15 453	16 715

A break-down of income earned from traffic operations in the three centres for 1983-84 (in \$'000) is as follows: Hobart, 4 067; Launceston, 959; and Burnie, 342. Loan Debt of Trust

Net advances to the Trust from the State Loan Fund at 30 June 1984 stood at \$3 916 575.

### Operating Statistics

The next table shows the principal operating statistics for the Metropolitan Transport Trust for recent years:

### Metropolitan Transport Trust, Tasmania Operating Statistics

Particulars	1979-80	1980-81	1981-82	1982-83	1983-84
Route-kilometres (a)	464 9 511	484 9 973	493 9 691	498 9 601	519 9 500
Passenger journeys'000	16 571	16 401	14 283	14 318	14 538

continued next page

# Metropolitan Transport Trust, Tasmania Operating Statistics—continued

Particulars	1979-80	1980-81	1981-82	1982-83	1983-84
Fare income per passenger					
journey (b)\$ Working expenses per passenger	0.24	0.29	0.38	0.38	0.37
journey (c)\$	0.63	0.76	0.94	1.00	1.07

- (a) At end of period. (b) Income from traffic operations only, excludes other earnings.
- (c) Excludes debt charges and depreciation.

### ROADS AND BRIDGES

### Scope

The details relating to roads in the following section refer to:

- 'classified' roads;
- · roads of local government authorities; and
- roads of other government authorities.

A further qualification is that the roads are those normally open to traffic.

## **Definitions and Road Lengths**

- Classified roads: These are roads for which the State Government accepts direct responsibility, the construction and maintenance authority being the Department of Main Roads. The length of classified (or State) roads at 30 June 1983 was 3 967 kilometres (see later section for further details).
- Roads of Local Government Authorities: The length of roads for which local government authorities accepted responsibility at 30 June 1983 totalled 13 091 kilometres.
- Roads of Other Authorities: Roads which were the responsibility of these authorities at 30 June 1983 comprised: roads of the Hydro-Electric Commission, 520 kilometres; Forestry Commission, 4632 kilometres; total 5152 kilometres. The Hydro-Electric Commission roads include the Gordon River Road from Maydena to the Gordon River Dam site (85 kilometres) and the Scotts Peak Road which runs from the Gordon River Road to Scotts Peak Dam (35 kilometres).

Apart from some new arterial roads constructed by the Department of Main Roads (e.g. Hobart's southern and eastern outlets), works performed by the Department and local government authorities are almost entirely in the upgrading of existing roads or tracks to a higher standard and the maintenance of existing road standards. Recent construction of roads where no previous route existed has been predominantly attributable to the Forestry Commission in its development of forest areas for commercial use, and to the Hydro-Electric Commission in providing access to power development construction sites. The main areas where the Commission's activities have already affected the road systems are in the upper Derwent, Great Lake, Mersey Valley, the Gordon and Pedder Lakes, and the Pieman River areas.

### Surface of Roads

The following table shows lengths of all roads normally open to traffic classified according to road surface and according to the level of government which accepts responsibility for their construction and maintenance. The proportion of classified (State) roads with sealed surfaces has increased from 72.2 per cent at 30 June 1967 to 87.4 per cent at 30 June 1983.

### ROADS AND BRIDGES

### Length of Roads according to Nature of Surface, Tasmania at 30 June

Type of surface	1978	1979(a)	1980	1981	1982	1983
Cla	assified St	ate Roads				
Sealed (b)km Unsealed (c)km	3 256 439	3 216 448	3 274 486	3 404 502	3 420 482	3 466 501
Totalkm	3 695	3 664	3 760	3 907	3 902	3 967
Sealed ratio (d)	88.1	87.8	87.1	87.1	87.6	87.4
Roads of L	ocal Gove	rnment Au	thorities			
Sealed (b)km Unsealed (c)km	4 013 8 801	3 848 8 926	4 302 8 666	4 272 8 678	4 408 8 573	4 753 8 338
Totalkm	12 814	12 774	12 967	12 950	12 981	13 091
Sealed ratio (d)	31.3	30.1	33.2	33.0	34.0	36.3
Road	ds of Othe	r Authoriti	es			
Sealed (b)	113 5 604	132 5 106	136 5 318	132 5 496	187 5 245	225 4 927
Totalkm	5 717	5 238	5 453	5 628	5 432	5 152
Sealed ratio (d)	2.0	2.5	2.5	2.3	3.4	4.4
	All R	oads				
Sealed (b)         km           Unsealed (c)         km	7 382 14 844	7 196 14 480	7 735 14 529	7 808 14 728	8 015 14 300	8 444 13 766
Totalkm	22 226	21 676	22 264	22 537	22 315	22 210
Sealed ratio (d)%	33.2	33.2	34.7	34.6	35.9	38.0

<sup>(</sup>a) Decreases are due to revision of figures by the Department of Main Roads. (b) Bitumen or concrete.

### Classified (or State) Roads

The next table analyses the length of classified roads according to their description and surface. The principal State highways include the following: Arthur (73 kilometres), from Sorell to Port Arthur; Bass (279 kilometres), from Launceston to Marrawah in the far north-west; Channel (94 kilometres), from Hobart to Huonville, via D'Entrecasteaux area and Cygnet; Huon (99 kilometres), from Hobart to Hythe via Longley and Huonville; Lake (149 kilometres), from Deloraine via Great Lake to Melton Mowbray; Lyell (284 kilometres), from Granton near Hobart, to Strahan; Midland (180 kilometres), from Claremont to Launceston; Murchison (142 kilometres), linking the Bass and Waratah Highways; Tasman (419 kilometres), from Hobart to Launceston, via the east coast and St Helens; Waratah (72 kilometres), from Somerset to Waratah.

Classified (or State) Roads, Tasmania, Description and Length of Roads at 30 June 1983 (Kilometres)

	Nature o	Total	
Description	Sealed (a)	Unsealed (b)	Totat
Highways	1 848	98	1 946
Main roads	1 147	143	1 290
Secondary roads	238	45	283
Tourist roads	73	99	172
Developmental roads	20	25	45
Subsidised roads	102	54	156
Total	3 428	464	3 892

<sup>(</sup>a) Bitumen or concrete. (b) Gravel or stone.

<sup>(</sup>c) Includes roads formed or cleared only. (d) Sealed roads as a proportion of total roads.

# **Expenditure on Roads and Bridges**

As indicated earlier in this section, the responsibility for road construction and maintenance is placed upon the State Government, local government authorities and two public enterprises. The next table gives an analysis of funds available to the State Government for roadworks and of expenditure from State road funds.

Commonwealth Government Road Grants provide the bulk of the funds with a major contribution also coming from motor vehicle taxation, registration fees, etc.

State Road Funds, Tasmania: Receipts and Payments (a) (\$'000)

Particulars	1980-81	1981-82	1982-83
Receipts			
State Government source—			
Motor vehicle and drivers taxation	18 369	18 896	17 130
Road maintenance contributions, taxes and charges	302	388	17 150
Loans (b)	11 255	6 931	7 505
Petroleum products business franchise licence fees		3 900	9 837
Other	5 102	5 556	6 574
Commonwealth Government grants	40 965	48 549	64 447
Contributions by local government authorities	18	18	20
Total	76 011	84 238	105 513
Payments			
Construction and reconstruction of roads and bridges	54 687	63 138	80 611
Maintenance of roads and bridges	14 840	16 585	19 329
Planning and research	541	-	17 329
Total	70 068	79 723	99 940

<sup>(</sup>a) Includes receipts and payments in respect of Forestry Commission and Hydro-Electric Commission roads.

# Receipts and Expenditure, Local Government Authorities

Some of the expenditure appearing in the State Road Funds table consists of grants from the State Government to local government authorities, although such grants are not specifically dissected. Chapter 4, 'Public Finance', contains details of: grants from the State to local government authorities for road purposes; road rates collected by local government authorities; and expenditure on road construction and maintenance by local government authorities from revenue, and from loan funds.

# MOTOR VEHICLE REGISTRATIONS

### General

Statistics in this section deal with: motor vehicles 'on register' at specific dates; and new motor vehicles registered within a specified period, e.g. a year.

### **Definitions**

Register: To be allowed on the public roads, motor vehicles, except those owned by the Commonwealth Government, are required to be registered with Transport Tasmania; State Government vehicles, as well as privately-owned vehicles, are registered with this authority. Commonwealth Government-owned vehicles, except those belonging to the defence services, are recorded on a separate Commonwealth Government register. On

<sup>(</sup>b) Includes amounts made available from the Loan Fund to the Department of Main Roads, \$2 439 000 in 1981-82 and \$2 150 000 in 1982-83, together with amounts made available to the Forestry Commission and the Hydro-Electric Commission for roadworks.

the register', in this section, refers to both the State and Commonwealth Government registration records, and to all motor vehicles except those of the defence services. Statistics of new motor vehicle registrations comply with the same definition.

Vehicles Included: The statistics cover cars, station wagons, motor cycles and commercial vehicles. Commercial vehicles as defined include utilities, panel vans, rigid and articulated trucks, other truck-type vehicles (i.e. commercial vehicles used for purposes other than freight carrying, e.g. campervans, tow trucks, ambulances and hearses) and omnibuses. Tractors, trailers and mobile plant and equipment are excluded.

Because of the multi-purpose nature of rear-door sedans it is possible for these types of vehicles to be registered as either cars or station wagons. Therefore from March 1983 motor cars and station wagons have been compiled as one group.

# Vehicles on Register

The following table has been compiled to show, in summary form, the increase in motor vehicles on the register since 1910. To give a convenient measure of this growth, vehicles on the register have been related to the population (vehicles per 1 000 persons), and increases have been expressed as annual averages for each decade.

At 30 June	Cars and station wagons	Commercial vehicles	Motor cycles	Total	All vehicles average annual increase (a)	Per 1 000 of population
	'000	'000	'000	'000	'000	no.
1910	0.2	(b)	0.2	0.4	_	2
1920	2.4	(b)	1.7	4.1	0.4	20
1930	12.5	2.2	4.8	19.5	1.5	89
1940	17.6	5.2	3.4	26.2	0.7	109
1950	25.3	12.9	4.9	43.2	1.7	156
1960	63.7	26.4	3.1	93.2	5.0	271
1970	118.6	32.6	3.1	154.3	6.1	398
1980	177.2	47.5	4.7	229.5	7.5	542
1984	195.0	54.8	6.1	255.9	(c) 6.6	587

Motor Vehicles on Register from 1910, Tasmania

### Motor Vehicles on Register in Australia

To obtain uniform statistics for all States and territories, the Bureau has adopted the following definition of 'motor vehicles on register at a particular date': vehicles whose fees were paid up at that date, in respect of that date; and vehicles whose fees were not paid up at that date but subsequently were paid retrospectively to that date (or to an earlier date); and excluding all vehicles whose fees were not subsequently paid up in respect of that particular date, even though at that date their registrations may not have been formally terminated.

The following table shows estimated details of motor vehicles on the register for each State and territory at 30 June 1984. The figures have been supplied by the respective registration authorities. Diplomatic and consular vehicles and all Commonwealth Government-owned vehicles other than those belonging to the defence services are included.

<sup>(</sup>a) For decade ending in year shown. (b) Included with cars and station wagons.

<sup>(</sup>c) For four years ended 30 June 1984.

	<i>C</i>			All v	ehicles
State or territory	Cars and station wagons	Commercial vehicles	Motor cycles	Total	Per 1 000 of population
	'000	'000	'000	'000	no.
New South Wales	2 168.8	587.5	134.6	2 890.8	535.7
Victoria	1 859.7	400.3	81.7	2 341.8	575.6
Queensland	1 066.0	373.4	94.0	1 533.5	614.1
Western Australia	592.5	201.8	35.8	830.0	601.9
South Australia	613.9	138.5	37.7	790.2	585.1
Tasmania	195.0	54.8	6.1	255.9	587.1
Northern Territory	36.7	26.3	4.0	67.0	485.9
Australian Capital Territory	103.5	15.5	4.7	123.6	508.4
Total	6 636.2	1 798.4	398.4	8 832.8	569.6

# Registration of New Motor Vehicles

The motor vehicle classification system used in compiling these statistics has as its main features:

- the acceptance of vehicle-type data as recorded by the registration authority, e.g. allocation of commercial vehicles to the categories 'utilities, panel vans' or 'rigid trucks' solely on the basis of recorded body-type;
- tare groupings of motor cars and station wagons, utilities, and panel vans;
- gross vehicle mass (tare plus specified carrying capacity), groupings of rigid trucks;
- gross combination mass (combined tare plus specified carrying capacity) groupings of articulated trucks.

Registrations of New Motor Vehicles, Tasmania

Type of vehicle	1979	1980	1981	1982	1983	1984
Motor cars	11 271	10 810	10 259	8 796] (	a) 12 029	13 760
Station wagons	2 513	2 655	2 854	2 442	-,	10 .00
Commercial-type vehicles—				,		
Utilities	1 163	1 595	1 700	1 264	1 326	1 768
Panel vans	840	810	974	906	884	1 055
Trucks—					• • • • • • • • • • • • • • • • • • • •	1 000
Rigid	894	804	471	617	891	1 090
Articulated	138	180	121	49	83	133
Other (b)	96	66	88	101	101	133
Buses	101	113	97	122	120	113
Motor cycles	1 039	1 157	1 286	989	1 050	993
Total	18 055	18 190	17 850	15 286	16 484	19 045

<sup>(</sup>a) Since March 1983 motor cars and station wagons have been compiled as one group because of increasing difficulties in classifying particular models.

# Scrapping of Motor Vehicles

Apart from the few 'veteran' cars owned by enthusiasts, most vehicles are eventually scrapped. No information is collected on the number scrapped each year but the following table contains information from which some inferences may be drawn:

<sup>(</sup>b) Comprises non-freight carrying vehicles (e.g. tow trucks, fire engines, campervans, ambulances and hearses).

New Motor Vehicles Registered and	Annual Increase in Motor	Vehicles on Register, Tasmania
	(2000)	<del>-</del>

Particulars	1979	1980	1981	1982	1983	1984
New motor vehicles registered (a)	18.1	18.2	17.9	15.3	16.5	19.0
register (b)	7.4	6.0	6.0	5.2	7.2	6.6

<sup>(</sup>a) During year ended 31 December.

In comparing the two sets of figures in the previous table, it would be wrong to assume that the difference in each year represented scrapped vehicles only: exceptions would include vehicles transferred interstate and vehicles 'on blocks'—the fact that an owner has let a registration expire does not necessarily mean that he intends to scrap his vehicle. Subject to these and similar difficulties of interpretation, it would appear that about 21 500 motor vehicles have been scrapped during the last two years.

# Registrations of New Motor Vehicles According to Make

The table that follows gives details of Tasmanian registrations of new motor cars and station wagons and commercial vehicles according to make. It illustrates the present popularity of Ford, Toyota, Holden, Nissan, Mitsubishi and Mazda makes, which accounted for 89 per cent of all new motor vehicles of this type registered during 1984.

Registrations of New Motor Vehicles, Tasmania, 1984 Classified by Predominant Make

		or cars ion wagons	Commercial vehicles			
Make	Number	Proportion of total cars and station wagons (per cent)	Number	Proportion of total commercia vehicles (per cent)		
Alfa Romeo	33	0.2		_		
BMW	58	0.4				
Daihatsu	79	0.6	77	1.8		
Fiat	21	0.2				
Ford	3 670	26.7	552	12.9		
Hino	_	_	51	1.2		
Holden	2 896	21.0	477	11.1		
Honda	207	1.5	104	2.4		
nternational			31	0.7		
suzu		-	156	3.6		
Mack	_		27	0.6		
Mazda	904	6.6	306	7.1		
Mercedes-Benz	20	0.1	16	0.4		
Mitsubishi	1 051	7.6	255	5.9		
Nissan	1811	13.2	652	15.2		
Peugeot	34	0.2	_			
Range Rover	24	0.2	_			
Rover	75	0.5	_			
Saab	49	0.4		_		
Scania			48	1.1		
Subaru	383	2.8	iř	1.8		
Suzuki	11	0.1	221	5.1		
Гоуоtа	2 296	16.7	1 162	27.1		
Volkswagen	1	_	19	0.4		
Volvo	103	0.7	30	0.7		
Other	34	0.2	31	0.7		
Total	13 760	100.0	4 292	100.0		

<sup>(</sup>b) Annual increase measured at 31 December.

### ROAD ACCIDENTS IN TASMANIA

### **Scope of Statistics**

In recent years there has been increasing interest in the number of road traffic accidents and their causes and consequences. To evolve meaningful statistics describing these events, it has been found necessary to narrow the field of observation to those road traffic accidents which involve casualties, since most accidents resulting only in vehicle damage are not required by Tasmanian law to be reported to the police (the drivers might merely exchange names and report to their respective insurance companies). Further, there is the difficulty of fixing, in monetary terms, some valid standard for determining what degree of vehicle damage warrants inclusion of an accident in a long-term statistical series—obviously \$50 or \$200 for repairs in 1950 is not comparable with \$50 or \$200 for repairs now.

For these and other reasons, the statistics in this section are restricted to details of those road traffic accidents involving casualties requiring medical or surgical treatment, or causing death, and which were recorded by the police.

# Responsibility for, and Causes of, Accidents

For the purpose of the statistics in this section, the police officer reporting the accident determines, on the basis of the evidence available, the road user or agency responsible, and also the prime cause of the accident. The fact that civil or criminal courts may later make different decisions on these matters is disregarded in these statistics; nor is any attempt made to distinguish between accidents giving rise to subsequent legal action and those not doing so.

### Causes of Accidents

Causes of accidents in Tasmania are classified, for statistical purposes, in accordance with a standard list of over 200 prime causes (although, in this section, only the most frequent causes are shown). Contributory causes and conflicting or incomplete evidence make precise classification difficult. No provision is made to record and classify such antecedent causes as fatigue, discourtesy, impatience or other driving faults. However, since July 1971 accidents where consumption of alcohol is involved have been given a special classification. Where the blood alcohol level of the road user considered responsible is 0.05 (grams of alcohol per 100 millilitres of blood) or greater, this is recorded separately and no other cause for the accident is assigned. The same practice is followed for road users who (a) were reported 'obviously affected by alcohol' and refused breath and/or blood tests, were not tested because facilities were not readily available, or were tested with no result available; or (b) had a blood alcohol level between 0.01 and 0.04 inclusive. The double assumption in each such case is that the road user's skills were impaired by alcohol and that this impairment was a factor contributing to the accident.

### **Road Traffic Accident Statistics**

# Summary

The following table summarises the principal statistics of road traffic accidents involving casualties for recent years.

### Road Traffic Accidents Involving Casualties, Tasmania

Accidents		Perso	ons killed	Persons injured		
Period	Number	Per 10 000 vehicles registered (a)	Number	Per 10 000 vehicles registered (a)	Number	Per 10 000 vehicles registered (a)
1980	1 571	68	100	r 4.4	2 133	r 93
1981	1 629	69	111	4.7	2 273	96
1982	1 321	r 55	96	4.0	1 871	77
1983	1 100	44	70	2.8	1 473	59
1984	1 445	56	84	3.3	2 015	79

<sup>(</sup>a) Based on the number of motor vehicles on register at 30 June. 'Vehicles on register' is defined in the earlier section headed 'Motor Vehicle Registrations'.

# Road Users Killed or Injured

The next table analyses the type of road user killed or injured:

Type of Road User Killed or Injured, Tasmania, 1984

	Killed			Injured			
Types of road user involved	Males	Females	Persons	Males	Females	Persons	
Drivers of motor vehicles	28	8	36	544	355	899	
Drivers of motor cycles	9	_	9	184	3	187	
Pedal cyclists	4		4	53	6	59	
Passengers—							
Motor vehicle	13	4	17	300	352	652	
Motor cycle	_			20	17	37	
Other	_	_		4	1	5	
Pedestrians	9	8	17	105	70	175	
Horse riders	_	1	1	1	_	1	
Total	63	21	84	1 211	804	2 015	

# Age and Sex of Road Users Killed

The next table shows the age and sex of the various types of road user killed:

Road Traffic Accidents, Tasmania, 1984 Age and Sex of Road Users Killed

	Type of road user killed						
Age group (in years)	Drivers of Drivers of motor motor vehicles cycles		Pedal cyclists	Passengers (all types)	Pedestrians	All road users	
			Males				
Under 7	_	_	_	1	3	4	
7-16	_	2	3	1	1	7	
7-20	10	4		4	_	18	
.1-29	5	3	*******	4	1	13	
0-39	4		1	2	1	8	
0-49	2	_	_	_	_	2 2	
0-59	1	_	_	1	_		
0 and over	6			<del></del>	3	9	
Total	28	9	4	13	9	63	
		F	'emales				
Jnder 7					2	2	
7-16	-			_		-	
7-20	2		_	. 1		3	
1-29	2	_		2		4	
0-39	_		_	<del></del>	_	(a) 1	
0-49	1	_			_	1	
0-59	1	_	_	-	1	2	
0 and over	2			1	5	8	
Total		_		4	8	(a) 21	

<sup>(</sup>a) Includes one female horse rider.

# Responsibility for Road Accidents

The next table shows the type of road user or agency believed responsible:

Accidents and Casualties by Cause of Accident, Tasmania, 1984

Cause	Accidents involving casualties	Persons killed	Persons injured	
Drivers of motor vehicles	981	55	1 489	
Drivers of motor cycles	100	6	122	
Pedal cyclists	35	2	33	
Pedestrians	141	15	129	
Passengers	2	<del></del>	2	
Motor vehicle defects	21	_	26	
Motor cycle defects	3	_	5	
Pedal cycle defects	9	1	8	
Animals	10	1	10	
Road conditions	98	3	136	
Weather	8		9	
Parties not involved (a)	37	1	46	
Total	1 445	84	2 015	

<sup>(</sup>a) e.g. a car collides with another, after swerving to avoid a pedestrian who is not struck.

### Age and Responsibility

Drivers of motor vehicles (excluding motor cycles) were believed responsible for 981 out of the 1 445 accidents involving casualties which were reported to the police during 1984.

Drivers under 25 accounted for 445 or 45 per cent of these accidents (male drivers under 25, 315; female drivers under 25, 130).

Casualties associated with accidents attributed to drivers under 25 were: killed, 23; injured, 689.

The following table analyses the age and sex of the drivers responsible:

Road Traffic Accidents, Tasmania, 1984 By Age and Sex of Drivers of Motor Vehicles Responsible

Age group of drivers responsible (in years)	Accidents involving casualties	Persons killed (a)	Persons injurea (a)
Under 17—			
Males	6	· <u> </u>	12
Females	3	_	5
17-20—			
Males	193	12	320
Females	80	1	118
21-24—			
Males	116	10	172
Females	47	_	62
25-29—			
Males	76	3	107
Females	42	2	71
30-39—			
Males	86	12	118
Females	51	_	79
10-49—			
Males	59	4	85
Females	40	1	60
50-59—			
Males	43	1	69
Females	15	1	24
60 and over			
Males	65	6	104
Females	23	2	33

Road Traffic Accidents, Tasmania, 1984	
By Age and Sex of Drivers of Motor Vehicles Responsible—continued	1

Age group of drivers responsible (in years)	Accidents involving casualties	Persons killed (a)	Persons injured (a)
Not stand (b)			
Not stated (b)—	22		27
Males	23		37
Females	2		2
Total			
Males	667	48	1 024
Females	303	- 7	454
Unknown (b)	11	<del></del>	11
Grand total	981	55	1 489

<sup>(</sup>a) The age groups relate to the driver who may or may not be included in the casualty figures.

# Causes of Accidents—Drivers of Motor Vehicles Responsible

The next table analyses accidents for which drivers of motor vehicles were believed responsible:

Road Traffic Accidents Caused by Drivers of Motor Vehicles, Tasmania, 1984 Classification by Cause

Principal causes of accidents for which drivers of motor vehicles (excluding motor cycles) were responsible	Accidents involving casualties	Persons killed	Persons injured
Accidents involving alcohol—			
Driver's blood alcohol level 0.05 (a) or greater	171	25	253
Driver refused test	1		2
Other cases (b)	46	3	79
Excessive speed having regard to conditions	121	6	200
Not keeping to the left	41	3	82
Not giving right of way	105	1	166
Making a right-hand turn without due care	52	1	73
Inexperience	29	_	54
Inattentive driving	158	4	208
Reversing without due care	7	_	10
Improper overtaking	24	3	33
Following other vehicle too closely	19	_	24
Infirmity of driver	13	1	19
Driver asleep or drowsy	28	2	37
Pulling out from kerb without warning	25	2	29
Failing to observe traffic sign or signal	124	4	196
Hit-run (n.e.i.)	7		7
Other causes (including not stated or not known)	10	_	17
Total	981	55	1 489

<sup>(</sup>a) Grams of alcohol per 100 millilitres of blood.

# Alcohol-factor Accidents, Drivers of Motor Vehicles Responsible

The following table shows the numbers of drivers of motor vehicles (excluding motor cycles) believed responsible for casualty accidents in which alcohol was a possible prime or antecedant cause, classified by blood alcohol level and age group:

<sup>(</sup>b) Includes accidents for which hit-run drivers were responsible.

<sup>(</sup>b) Driver responsible reported 'obviously affected by alcohol' and either was not tested or was tested with no result available; or had a blood alcohol level between 0.01 and 0.04 inclusive.

Road Traffic Accidents Involving Alcohol, Drivers of Motor Vehicles Responsib	le, Tasmania, 19	84
According to Blood Alcohol Level and Age Group		

	Age group of drivers responsible (in years)							an 1	
Blood alcohol level (a)	Under 21	21-24	25-29	30-39	40-49	50-59	60 and over	Not stated	Total
Less than 0.05	7	8	5	3	1	3	_	2	29
0.05	7	1	1		1				10
0.06	1	2	attributes.	_	were	1	1		5
0.07	3	1	1	2		-	_		7
0.08	4	3	-	3					10
0.09 or 0.10	4	7	8	2	1	1	_	_	23
0.11 or 0.12	11	12	5	2	5	_	_	1	36
0.13 or 0.14	7	7	4	3	3	_	_	_	24
0.15 or 0.16	5	3	2		2	_	2	1	15
0.17 or 0.18	2	6	_	2	_		2	1	13
0.19 or 0.20	3	2	4	3	1				13
0.21-0.24	1	1		5			_	1	8
0.25 or above	1	1		4	1	num.		_	7
Refused test	_	_			1				1
Test facilities not									
available	_	2	_	_	1	1	_	_	4
Tested but no									
result available	4		2	3	3		_	11	13
Total	60	56	32	32	20	6	5	7	218

<sup>(</sup>a) Grams of alcohol per 100 millilitres of blood.

# Causes of Accidents—Motor Cycle Drivers Responsible

The table below analyses road traffic accidents for which motor cycle drivers were held responsible:

Road Traffic Accidents, Motor Cycle Drivers Responsible, Tasmania, 1984 Classification by Cause

Principle causes of accidents for which drivers of motor cycles were responsible	Accidents involving casualties	Persons killed	Persons injured
Accidents involving alcohol—			
Driver's blood alcohol level 0.05 (a) or greater	14	4	19
Other cases (b)	4	_	6
Other accidents—			
Excessive speed	18	_	23
Not keeping left	11	2	13
Failing to give right of way	6	_	6
Inexperience	16	_	20
Inattentive driving	15	_	16
Other	16	_	19
Total	100	6	122

<sup>(</sup>a) Grams of alcohol per 100 millilitres of blood.

<sup>(</sup>b) Driver responsible reported 'obviously affected by alcohol' but not tested because facilities not readily available, or had a blood alcohol level between 0.01 and 0.04 inclusive.

# Causes of Accidents—Pedestrians Responsible

The table below analyses road traffic accidents for which pedestrians were held responsible:

Road Traffic Accidents, Pedestrians Responsible, Tasmania, 1984 Classification by Cause

Principal causes of accidents for which pedestrians were responsible	Accidents involving casualties	Persons killed	Persons injured
Accidents involving alcohol—			
Pedestrian's blood alcohol level 0.05 (a) or greater	2	2	_
Other cases (b)	12	1	11
Other accidents—			
Walking across roadway without due care	44	5	41
Running across roadway	47	3	45
Passing behind or in front of moving or stationary vehicle or object	12	1	11
Children (under seven years of age) not under, or breaking away from, the supervision of an older person	12	3	9
Stepping off kerb without due care	0		9
Other	á	_	3
Total	141	15	129

<sup>(</sup>a) Grams of alcohol per 100 millilitres of blood.

# Location of Accidents

The next table shows the location of accidents in the State:

Road Traffic Accidents and Casualties by Local Government Area, 1984

Local government area	Accidents involving casualties	Persons killed	Persons injured	
Hobart	203	3	271	
Launceston	127	4	173	
Glenorchy	126	7	165	
Clarence	126	6	176	
Devonport	92	5	106	
Burnie	61		88	
Other	710	59	1 036	
Tasmania	1 445	84	2 015	

### Road Features and Accidents

The following table analyses all accidents involving casualties according to road features at the site and shows that, in 1984, 33 per cent of accidents occurred on a straight section of road:

<sup>(</sup>b) Pedestrian responsible reported 'obviously affected by alcohol' by police but not tested because facilities not readily available, or had a blood alcohol level between 0.01 and 0.04 inclusive.

Features of Roadways on	Which Accidents	Occurred.	Tasmania	1984
-------------------------	-----------------	-----------	----------	------

England of the A	Accidents involving casualties		_	
Feature of roadway	Number	Per cent of total	Persons killed	Persons injured
At intersections—				
Cross	246	17.0	4	350
'T'	175	12.1	5	269
Roundabout	7	0.5		209
Other	53	3.7	3	65
Other than at intersections—		• • • • • • • • • • • • • • • • • • • •	•	0.5
Straight road	471	32.6	47	593
Bend or curve	417	28.9	22	636
Bridge, culvert or causeway	16	1.1		23
Railway level crossing	4	0.3	_	- 23 - 5
Other	55	3.8	- 3	63
Not stated	1	0.1		2
Total	1 445	100.0	84	2 015

# Types of Accidents

Most accidents arise from collisions between vehicles, followed by accidents in which vehicles collide with fixed objects, as shown in the following analysis:

Types of Accidents, Tasmania, 1984

Type of accident	Accidents involving casualties	Persons killed	Persons injured
Collisions—			
Angle	484	17	726
Rear end	115	· <u> </u>	152
Head on	87	18	167
Side swipe—Same direction	10	_	11
Side swipe—Opposite direction	10	_	21
Other	47	2	53
Vehicle—			
Overturning or leaving road	169	7	253
Colliding with fixed object	307	22	416
Colliding with animal	7	_	8
Colliding with pedestrian	183	17	180
Passenger accidents	2	_	2
Other types	24	1	26
Total	1 445	84	2 015

# Time of Day When Accidents Occurred

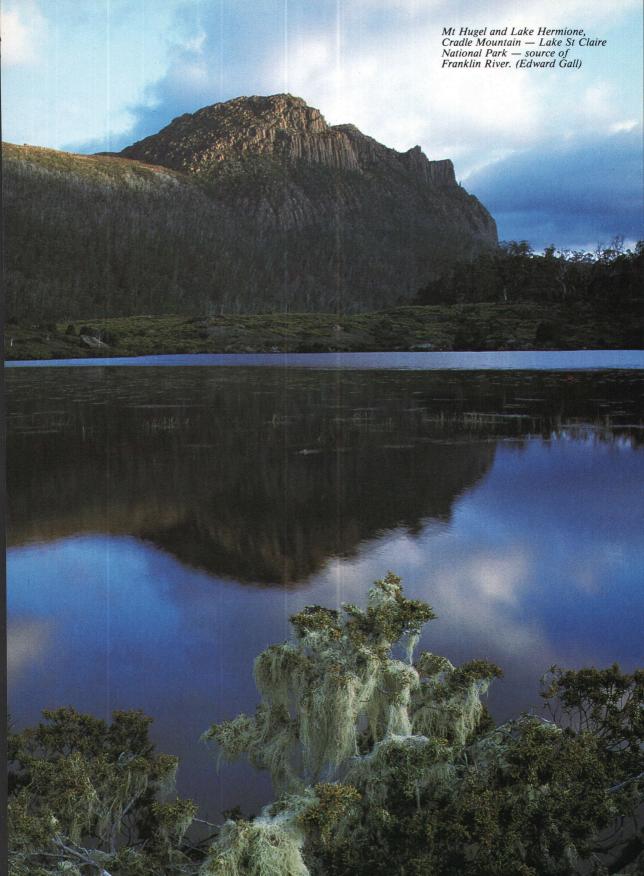
The following diagram shows the time of day when accidents involving casualties occurred during 1984:



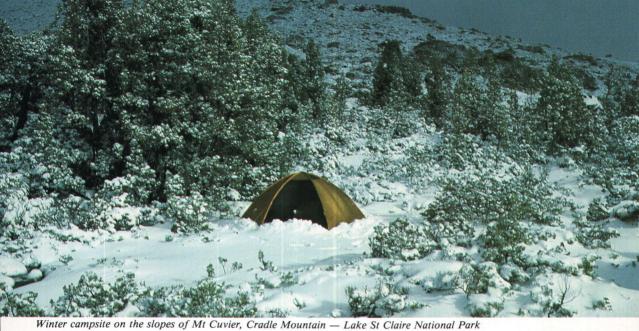




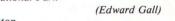


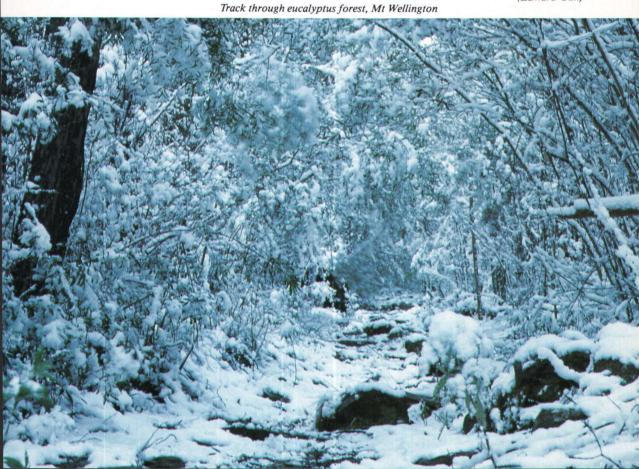


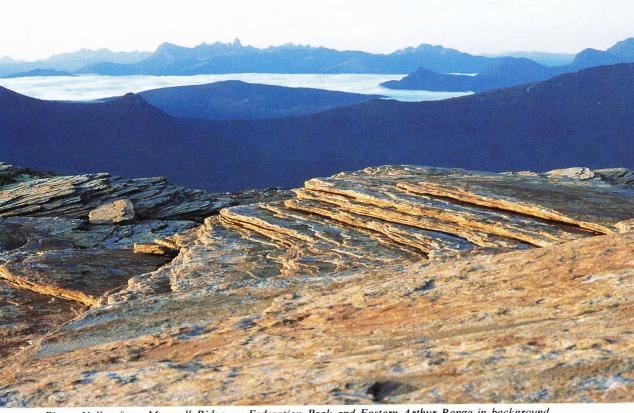




Winter campsite on the slopes of Mt Cuvier, Cradle Mountain — Lake St Claire National Park

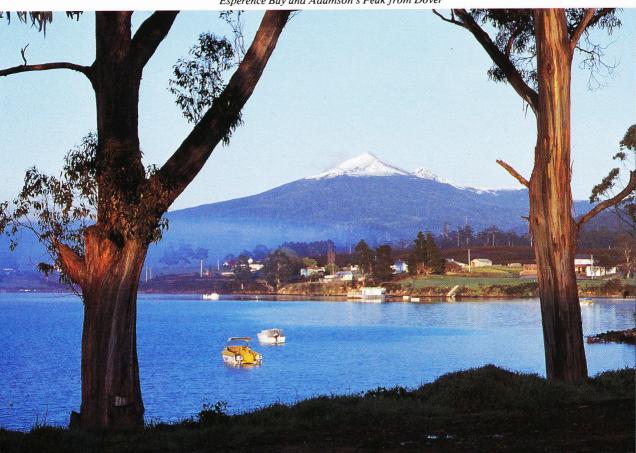


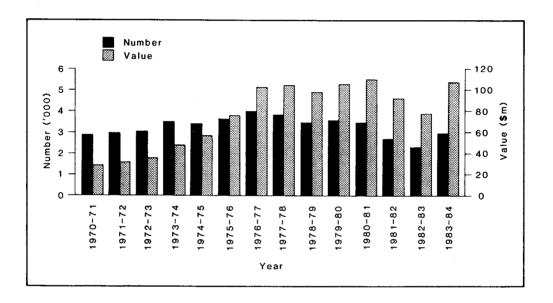




Picton Valley from Maxwell Ridge — Federation Peak and Eastern Arthur Range in background

Esperence Bay and Adamson's Peak from Dover (Edward Gall)





### Days of the Week on Which Accidents Occurred

The following table shows accidents and casualties according to the day of the week on which they occurred:

Road Traffic Accidents, Tasmania, 1984 Days of the Week on Which Accidents Occurred

Day of the week	Accidents involving casualties	Persons killed	Persons injured
Monday	197	9	284
Tuesday	190	10	250
Wednesday	156	3	204
Thursday	206	10	259
Friday	249	20	344
aturday	237	19	361
Sunday	210	13	313
Total	1 445	84	2 015

### Drivers Involved in Accidents, Age Group and Licence Type

During 1984 a total of 1 884 drivers of motor vehicles (excluding motor cycles) were involved in casualty accidents which were reported to the police. Of these, 26 per cent (487) were under 21 years of age and a further 28 per cent (531) were from 21 to 29 years of age.

The age group and type of driving licence held by these drivers at the time of the accident are shown in the next table:

Road Traffic Accidents, Drivers of Motor Vehicles Involved, Tasmania, 1984

According to Licence Type and Age Group

	Age group of drivers involved (in years)								
Type of driving licence	Under 21	21-24	25-29	30-39	40-49	50-59	60 and over	Not stated	Total drivers involved
Learner	20	4	1	1	2	_	_	_	28
Provisional	174	13	10	5	2	1	1	3	209
OrdinaryInterstate or inter-	236	248	194	261	176	114	122	18	1 369
national	2	8	_	11	5	6	4	_	36
No licence Not known/not ap-	17	7	6	6	4		_	2	42
plicable	38	19	21	27	17	10	24	44	200
Total	487	299	232	311	206	131	151	67	1 884

### No-Fault Third Party Insurance

'No-fault' third party insurance was introduced in Tasmania on 1 December 1974 under the *Motor Accidents (Liabilities and Compensation) Act* 1973. Prior to the introduction of the 'no-fault' scheme, motorists were compelled to insure with insurance companies against claims for personal injury by other persons resulting from motor vehicle accidents. The success of a claim was dependent upon the claimant proving negligence (or fault) on the part of the driver of a motor vehicle. 'No-fault' insurance, however, entitles a person to compensation for injuries sustained in a motor vehicle accident without regard to who was at fault. The extent of the compensation is determined by the scheduled benefits outlined in the Act. The operation of the scheme does not, however, preclude the individual from suing for damages should it be felt that the scheduled benefits are insufficient compensation and that the accident was the result of negligence. Insurance is compulsory under the Act.

### Premiums

Premiums vary according to the type of vehicle and the purpose for which it is used and are payable with vehicle registration fees. On 1 December 1984, the annual premium for most private passenger-type motor vehicles was \$114.00. Premiums are subject to review annually.

### Scheduled Benefits

The more important of the scheduled benefits prescribed in the Act are:

- medical, hospital and ambulance expenses;
- disability allowances for employed persons, self-employed persons or housekeeping;
- dependant's allowance;
- death benefits; and
- funeral benefits.

### Motor Accidents Insurance Board

The Motor Accidents Insurance Board, set up to administer the Act, consists of five members who are appointed by the Governor. The chairman, a legal practitioner, is appointed directly and each of the following organisations recommends one member: the Tasmanian Government Insurance Board; the Tasmanian branch of the Insurance Council of Australia; Transport Tasmania; and the Royal Automobile Club of Tasmania (representing the interests of motor vehicle users).

### AIR TRANSPORT IN TASMANIA

#### Introduction

1984 saw the introduction of East-West Airline services between Devonport and Hobart using Fokker F28 aircraft. Trans Australia Airlines continued to operate between Hobart-Christchurch under arrangements with Qantas. Air New Zealand also continued its services between Christchurch and Hobart. Following internal restructuring of Airlines of Tasmania Pty Ltd, the government granted a \$300 000 loan to assist the Company in its operations.

During 1984 Ansett Airlines of Australia, Trans Australia Airlines and East-West Airlines continued to provide the greater percentage of passenger traffic to and from the Tasmanian mainland.

Air freight is carried regularly between Melbourne and the major Tasmanian airports and islands, not only in the belly lockers of the regular domestic airlines, but also in a variety of aircraft including Boeing 727 of Ansett Airlines of Australia and TAA, together with the DC9 of Ipec. Smaller aircraft also carry a large amount of freight across Bass Strait and to the Tasmanian islands.

### Administration

Administration of the Air Navigation Act and Regulations in Tasmania

The Federal Air Navigation Act 1920 and associated regulations are administered for Tasmania by the Regional Director, Department of Aviation, Victoria-Tasmania Region. Regulation of aircraft and commercial operations within Tasmania is administered through Transport Tasmania under authority of the Traffic Act 1925. The Commonwealth Department's more important functions include the provision and maintenance of government aerodromes and associated facilities, the licensing of aircraft operators and pilots and a responsibility for supervising all aspects of air safety.

### Classification of Flying Activities

Flying activities are classified by regulation into the following well-defined categories:

- Private Operations: Being operations in which an aircraft is used for personal transportation—private or business, aerial work for which no form of remuneration is received, carriage of persons or goods for other than hire or reward, or the carriage of goods other than for the purposes of trade.
- Aerial Work Operations: These operations refer to the aircraft being used for
  aerial survey; spotting; photography; agriculture; advertising; flying
  training and the cartage of goods being the property of the pilot, owner
  or hirer of the aircraft for purposes of trade. Within Tasmania there
  are five licensed flying training organisations and two aerial agricultural
  organisations carrying out most of the aerial work activities. Other types
  of aerial work are carried out by a further nine operators.
- Charter Operations: These refer to aircraft hired for passenger or cargo movement, not between fixed terminals or to fixed schedules. There are 15 licensed charter operators based in Tasmania.

- Commuter Operations: These are regular public transport operations conducted in accordance with fixed schedules between fixed terminals using other than the large aircraft as used by Ansett, East-West and TAA. Operators are authorised to operate under supplementary airline licences. Services of this kind are provided to Tasmania by Phillip Island Air Charter and Kendell Airlines Pty Ltd and within Tasmania by Airlines of Tasmania Pty Ltd.
- Regular Public Transport: This refers to aircraft operating under an airline
  licensed to carry passengers and cargo according to fixed schedules and
  on specified routes. All services of this kind are provided to Tasmania
  by Ansett Airlines, East-West Airlines and Trans Australia Airlines.

### **Tasmanian Aerodromes**

Most major aerodromes in Tasmania are owned and operated by the Commonwealth Government through the Department of Aviation. The following sections describe both Commonwealth Government-owned and other aerodromes in Tasmania.

### Commonwealth Government-owned Aerodromes

Hobart Airport: Ranks eighth in the volume of passengers handled at Australian terminals. It was completed in 1956. Extension and strengthening of the runway, taxiway and aprons to take DC9 and Boeing 727 aircraft in full weight was completed in 1966. International operations to Christchurch, New Zealand, commenced during November 1980, with Ansett Airlines (ceased operations on 3 March 1982) and Trans Australia Airlines operating on behalf of Qantas. The airport is equipped with complex aviation aids. A new terminal and communication buildings were completed in 1976. A new international terminal was opened in 1983. It lies 18 kilometres by road from the city.

Launceston Airport: 16 kilometres south-east of Launceston, it ranks after Hobart in passenger volume but handles considerably more freight; it is the main terminal for the Ipec DC9 freighter. The area control centre provides air traffic control for Tasmania via repeater stations, south on Mount Wellington and north on Mount Barrow. The airport is also used for commuter operations, flying training, light aircraft charter and aerial work operations.

Wynyard Airport: This has one sealed runway of 1 341 metres and one 1 189 metres long for regular public transport operations, charter, aerial work and private operations. It has been upgraded to handle F27 aircraft and is currently being evaluated for jet operations. It also caters for a commuter service from Phillip Island (Vic.) operated by Phillip Island Air Charter.

King Island Airport: Located six kilometres north-east of Currie. It has three gravel runways, night lighting and radio navigational equipment. It caters for commuter services operated by Airlines of Tasmania Pty Ltd and Kendell Airlines, as well as charter and private aircraft operations.

Flinders Island Airport: Located five kilometres north of Whitemark. There are two gravel and one grass landing strips plus an apron, taxiway, terminal and navigation aid facilities. Main services being commuter provided by Airlines of Tasmania Pty Ltd and charter operations.

Cambridge Airport: this was constructed during the early period of aviation and has four runways. The proximity of hills prevent further development and after completion of the Hobart Airport, Cambridge became a centre for light aircraft activities.

### Locally Owned Aerodromes

Devonport Airport: Located 6 kilometres east of Devonport, it is owned by the Port of Devonport Authority under the Commonwealth Airport Local Ownership Plan. Originally constructed in the early 1930s, it was developed to handle DC3, DC4 and Viscount aircraft in 1950. 1982 saw the commencement of work to bring the airport up to DC9-F28 jet standard which was completed in October 1983 at a cost of \$6.5 million. Regular F27 passenger services of Ansett and F27 and F28 passenger services of East-West, commuter services of Airlines of Tasmania Pty Ltd together with aerial work, flying training, charter and private aircraft operations are carried on from this location.

Smithton Airport: Located three kilometres west of Smithton, it is owned by Transport Tasmania. It has a sealed main runway plus lesser gravel strips and is used for regular commuter services as well as itinerant charter and private operations.

St Helens Airport: The aerodrome is owned and operated by the Municipality of Portland. A grassed strip 1 189 metres long and 91 metres wide is of sufficient dimension to permit operations by DC3 and F27 type aircraft. The aerodrome currently serves the charter, aerial work and private operation requirements for the area and has a non-directional beacon for instrument navigation.

Queenstown Airport: The Municipality of Queenstown under the local ownership plan provided an authorised landing area for light aircraft in 1937. In 1963 work commenced on the construction of a runway suitable for the operation of DC3-type aircraft, which was opened on 17 April 1966. It is served by regular commuters of Airlines of Tasmania Pty Ltd.

Strahan Airport: This airport, together with Queenstown Airport, services the West Coast of Tasmania. Opened for regular public transport operations in 1964, Strahan aerodrome was constructed under the aerodrome local ownership plan and is owned by the Municipality of Strahan.

### Aircraft, Passenger and Freight Movements

The following table shows the number of scheduled aircraft movements at the principal airports in Tasmania during recent years. For the purposes of the statistics in this table a take-off is regarded as one movement and a landing as another.

Year	Hobart	Launceston	Devonport	Wynyard	King Island
1978	8 832	11 313	4 190	4 645	737
1979	8 555	11 550	3 856	4 367	713
1980	8 565	11 092	4 399	5 112	581
1981	8 742	10 879	3 904	4 928	(a)
1982	8 351	11 589	4 781	5 793	(a)
1983	7 346	10 949	5 327	5 537	(a)

Aircraft Movements: Principal Airports

The next table shows the volume of passengers and freight handled at each airport; the following definitions apply:

Passengers: The figures are for fare-paying passengers only at each airport and are the sum of embarkations and disembarkations.

Freight: The figures are the sum of all revenue freight (including excess baggage) loaded and unloaded at each airport.

<sup>(</sup>a) Regular public transport operated by Ansett Airlines of Australia ceased from 6 November 1980.

Year	Hobart	Launceston	Devonport	Wynyard	King Island
		Passenge	ers ('000)		
1978	448	367	81	86	15
1979	464	386	82	87	14
1980	479	390	91	90	10
1981	470	376	77	83	(b)
1982	458	376	78	75	(b)
1983	437	348	82	70	(b)
		Freight	(Tonnes)		
1978	9 588	16 794	399	380	117
1979	9 685	20 785	373	376	229
1980	9 726	21 512	321	359	155
981	11 716	22 710	264	338	(b)
1982	10 124	34 203	184	191	(b)
983	6 811	36 188	218	165	(b)

Passenger and Freight Movements: Principal Airports (a)

- (a) See definitions preceding this table.
- (b) Regular public transport operated by Ansett Airlines of Australia ceased from 6 November 1980.

The decrease in the total number of passengers carried by the principal airports (as shown in the above table) in 1983 over 1982 was five per cent. The total freight carried showed a decrease of three per cent over the same period.

### Comparison of Principal Australian Airports

The next table shows the volume of activity at the principal Australian airports in terms of the number of passengers, freight and aircraft movements. Details of international services have been excluded so that comparisons are purely in terms of domestic traffic (international services are centred on Melbourne, Sydney, Brisbane and Perth).

Passengers,	Freight and	l Aircraft l	Movements
Princip	oal Airports	, Australia	1983

Airport	Passengers	Freight (tonnes)	Aircraft movements	
Sydney	5 327 342	57 791	71 607	
Melbourne	4 433 984	72 942	56 527	
Brisbane	2 469 651	29 543	32 000	
Adelaide	1 626 520	14 895	21 907	
Perth	1 004 978	15 659	14 122	
Canberra	790 594	2 727	11 437	
Coolangatta	541 844	1 465	8 505	
Hobart	436 977	6 811	7 346	
Launceston	347 688	36 188	10 949	

### FREIGHT EQUALISATION

In April 1974, Mr J. F. Nimmo was appointed by the Commonwealth Government as a Commissioner of a 'Commission of Inquiry into Transport to and from Tasmania'. The Commission was appointed because of the widely held view that Tasmania suffered a considerable disability with regard to freight and passenger rates to and from mainland Australia compared to other States.

The Commission's Report (the 'Nimmo Report') was presented to the Government in March 1976. A summary of the Report is included in the 1977 Year Book. Following release of the report, the Federal Minister for Transport announced, on 9 June 1976, details of a scheme to be administered by the Tasmanian Branch of his Department for equalising the trans Bass Strait freight costs of Tasmanian manufacturers and producers who exported goods for use or sale on the mainland.

Under the scheme, consigners of interstate goods from Tasmania are paid assistance which is intended to compensate them for the excess transport charges they incur. A separate rate of assistance is calculated for each common item of freight for each major route between Tasmania and interstate destinations. The amount of assistance is calculated as the difference in cost for door-to-door transport of the item between Tasmania and the mainland, and that for transporting it over a comparable route on the mainland.

Payment of assistance is made to the actual consignor of the goods, leaving him free to choose the shipping line which provides the service best suited to his needs.

The TFES does not cover all consignments from Tasmania and three major categories of freight do not receive assistance payments:

- bulk cargoes were excluded from the scheme because they were found not to be disadvantaged relative to similar movements on the mainland;
- air cargo is not included because the Government considered that assistance would create inequities for manufacturers in comparable circumstances on the mainland:

On 6 April 1982 the Federal Minister for transport announced that in the event of industrial disputes, resulting in no shipping being available between Tasmania and the mainland, the amount of subsidy payable to consignors of sea freight under the Tasmanian Freight Equalisation Scheme will be payable to consignors in respect of air freight for those goods, northbound and southbound, that would otherwise have travelled by sea;

overseas cargoes were not included because many overseas shipping lines paid
the centralisation cost of moving containers between Tasmania and the
mainland. As such arrangements do not apply to some areas of the
mainland, the Government felt that TFES assistance to exports would
be discriminating in Tasmania's favour. However, in its 1978 Report,
the BTE recommended that further consideration be given to this
matter.

Associated with the introduction of freight equalisation assistance, sea freight rates were restored to economic levels. This involved increases to north-bound freight rates which had been frozen since 1974 and a lesser increase in south-bound rates. TFES rates of assistance were calculated on the basis of economic freight rates being charged.

Assistance in respect of south-bound goods and equipment for Tasmanian manufacturers and producers was announced in November 1977 and made retrospective to 1 July 1976. The goods eligible for south-bound assistance must be of Australian origin and suffer an actual freight cost disability. Eligible producers are: primary producers in respect of equipment and packing materials; and manufacturers and mining undertakings in respect of equipment used in the production process and raw materials input, provided that these total more than five per cent of the factory door cost of the finished product.

At the direction of the Federal Minister for Transport, the Bureau of Transport Economics re-assessed the freight disability for north-bound goods in late 1977. In recalculating the rates of assistance, the Bureau generally followed the methodology used by the Nimmo Inquiry but changed one significant aspect. While Nimmo determined rates of assistance by a comparison of the average transport costs for Tasmanian consignors for each commodity with that of their mainland counterparts, the BTE based the level of assistance on a comparison between the costs of the most efficient consignors in order to encourage efficiency. The Minister released the Bureau's report and announced new rates of assistance on 16 July 1978 which were retrospective to 1 July 1978.

In addition to recalculating rates of assistance, the Bureau introduced some small changes in the format of the Schedule of Rates in order to facilitate the preparation and payment of claims. Some commodity groups were split into two classifications to enable more exact compensation to be made and items with similar transport characteristics were grouped together to facilitate the introduction of new commodities into TFES in the future. The unit of measurement on which assistance payments are based was changed

from cubic metres (shipping space) to tonnes weight for a large proportion of commodity classifications.

The Bureau reviewed south-bound rates of assistance and north-bound rates for timber and livestock during 1979. The rates for sheep and cattle, and timber, were split into sub-classifications to allow more accurate calculation of freight equalisation rates. The Minister released the Bureau's report and announced new rates on 27 February 1980. The new rates were effective from 1 March 1980, with the exception of those for north-bound timber which were effective from 1 January 1980.

In 1980, the Bureau of Transport Economics began a review of the methodology used to calculate assistance rates as part of an overall review of the Scheme which is being undertaken by the Commonwealth Department of Transport.

In June 1980 the Federal Minister for Transport released a report by the Bureau of Transport Economics which outlined an alternative method of calculating TFES subsidies which may overcome some of the problems with the current method. The report, "Tasmanian Freight Equalisation Scheme: a 'Landbridge' Approach to the Estimation of Subsidy Rates' was considered as a discussion paper only and submissions were invited from Tasmanian industry indicating their views on it. The report was not implemented as policy.

In March 1984, the Federal Minister for Transport directed the Inter-State Commission to investigate matters relating to the TFES. The report, An Investigation of the Tasmanian Freight Equalisation Scheme, Volume 1, was released in April 1985 and is currently under consideration by the Commonwealth Government.

Freight Equalisation payments in 1983-84 totalled \$29 327 605, comprising 94 per cent paid to north-bound freight claimants and six per cent paid to south-bound claimants.

### POSTAL AND TELECOMMUNICATIONS SERVICES

### Introduction

Prior to 1 July 1975 the Postmaster-General's Department provided and controlled postal and telecommunications services in Tasmania, supported by engineering, finance and accounting, supply, personnel and administrative establishments. From 1 July 1975 control of these services has been vested in the Australian Postal Commission (Australia Post), the Australian Telecommunications Commission (Telecom) and the Telecommunications Department (now Department of Communications). The activities of these bodies in Tasmania are outlined below.

### Australia Post

Apart from its obvious role of providing postal services, Australia Post also acts as an agent for a number of other instrumentalities in transactions which include: Commonwealth Savings Bank deposits and withdrawals; Telecom Australia account payments; telegrams; Defence Service Home repayments; sale of State duty stamps; sale of income taxation instalment stamps; Medicare; State Division of Housing repayments; and State Taxation branch land tax repayments.

### The Postal Service

The first long-distance overland mail service in Australia was started between Hobart and Launceston in 1816, the carrier walking both ways and taking a fortnight for the round trip.

The number of individual postal articles handled in Tasmania in 1983-84 amounted to 58.9 million compared with 56.2 million in 1982-83. Australia Post handled 3 035 million articles throughout Australia in 1983-84 compared with 2 943 million in the previous year.

All mail to and from Tasmania and the mainland is carried by air as far as Melbourne, priority being given to priority paid mail, standard articles and mail on which airmail fees have been paid. The balance is forwarded on an 'Air Opportunity' basis. A priority paid mail service provides guaranteed delivery within Hobart and suburbs on the next working day. This service is also available between Hobart, Launceston, Devonport and Burnie. The service also extends interstate and to selected overseas countries. An overnight parcel service provides for next working day delivery of all mail throughout the State, with only minor exceptions.

### Courier Services

Australia Post also provides an express courier service for urgent items in Hobart with an intrastate network extending to Launceston, Devonport, Ulverstone, Burnie and many country areas and an interstate network, which includes all State capitals and major provincial centres. In addition, a high speed document transmission service called 'Intelpost' is available. The service operates between a network of intrastate and interstate post offices and covers items such as letters, documents, graphics and alphabets of any language. A two hour guaranteed delivery service is an integral part of the facility.

At 30 June 1984 Australia Post had a full-time staff in Tasmania of 717; 88 persons were employed part-time, 223 were employed at non-official post offices (and paid on the basis of the volume of business transacted) and 156 had mail service contracts with Australia Post. There were 520 street posting boxes in the State and 183 street delivery rounds were in operation.

	Postal Services, Tasmania								
Particulars	Unit	1978-79	1979-80	1980-81	1981-82	1982-83	1983-84		
Post Offices—									
Official	no.	42	42	42	41	41	41		
Non-Official	no.	207	244	196	194	195	192		
Postal traffic (a)—									
Standard letters	,000	51 828	53 902	57 204	51 503	49 603	50 669		
Non-standard									
articles	'000	12 252	10t962	6 628	5 773	5 986	6 459		
Parcels	'000	379	444	544	543	548	550		
Registered articles	'000	121	119	127	125	116	108		
Total	'000	64 580	65 427	64 503	57 944	56 253	57 786		

Postal Services Tasmania

### Australian Telecommunications Commission (Telecom Australia)

### Development of Telecommunications

Hobart and Launceston were linked by a telegraph line in 1857 and two years later a Bass Strait cable was in operation, only to fail in 1861. By 1869 a second cable was laid and communication with overseas countries became possible in 1872 when the Overland Telegraph was established between Adelaide and Darwin.

The first telephone line in Tasmania linked Hobart and the Mt Nelson signal station in 1880, both Hobart and Launceston having exchanges by 1883. However, no link with Victoria or overseas countries was provided until 1936.

The State is now served with a network of high-capacity, high-quality trunk channels which are extended to other Australian States and linked with the Seacom and Anzcan cables connecting Australia to overseas countries. There are also links to the Overseas Telecommunications Commission earth satellite stations at Carnarvon, Ceduna and Moree. The State is divided into three districts (which coincide with the STD area code districts), each in the charge of a District Telecommunications Manager.

Telegraph: The teleprinter exchange (TELEX) had only one Tasmanian subscriber in 1957 but 1 085 were connected by 30 June 1984. The TELEX service is fully automatic and subscribers can now contact each other without an exchange operator's assistance.

<sup>(</sup>a) Number of separate articles handled.

Calls can be made automatically to many overseas countries tied in with Australian telegraphic services, while the remainder can be contacted through an exchange operator.

Telephones: The Commission completed the conversion to automatic working of all the telephone exchanges in Tasmania on 15 June 1977. There were then 198 automatic exchanges in the State. Tasmania became the first Australian State to have a fully automatic telephone system.

Telephone and Telegraph Services

The following table analyses telephone and telegraph services in Tasmania:

	Lelecom	munication	s Services,	Tasmania			
Particulars	Unit	1978-79	1979-80	1980-81	1981-82	1982-83	1983-84
Telephone—							
Services in operation (a)—							
Business	'000	36	35	36	37	37	38
Non-business	,000	81	88	96	102	108	113
Total	'000	117	124	132	138	145	151
Public telephones	,000	1	1	1	1	1	1
Instruments in operation (a).	'000	164	174	202	192	212	231
Automatic exchanges (a)	no.	196	196	197	197	197	197
Value of calls made—							
Metered (local and STD).	\$'000	28 207	34 083	36 800	36 071	43 865	53 514
Trunk	\$'000	2 5 1 9	3 046	3 800	3 292	3 449	3 636
Public telephone (local and							
trunk)	\$'000	1 466	1 670	1 950	1 890	2 334	2 290
Telegraph—							
Phonograms lodged	'000	104	81	73	64	56	45
All telegrams lodged (b)	'000	178	135	122	107	91	74

Telecommunications Services Tasmania

Apart from Subscriber Trunk Dialling (STD) being available to all Tasmanian customers, International Subscriber Dialling (ISD) to more than 165 countries is now available upon request to 125 526 telephone subscribers throughout the State. At 13 June 1984, 67 020 subscribers have availed themselves of this facility.

There is an ever-increasing demand for facilities to provide rapid communications between computers and remote data terminals, over telecommunications links.

The Datel Service was introduced in 1969 to service this requirement. It includes a connecting link which is either a dedicated private line or switched network service, together with a modulator/demodulator (modem) required at each terminal location to translate the data into a form suitable for transmission through the Telecom network. At 13 June 1984, 2 382 modems were in service in Tasmania.

As the need for data communications in linking offices located throughout Australia and around the world becomes more vital, Telecom Australia's involvement in data communications has grown rapidly. In recognition of this need, Telecom now offers in addition to the Datel Service:

- The Digital Data Service (DDS), a leased line digital transmission service ideally suited for longer distance high volume data communication and
- Austpac, a switched data facility tailored to cater for low volume, long distance transmission to a variety of data bases.

The 'Telefinder Radio Paging Service', which commenced in Hobart on 14 November 1977, in Launceston on 19 February 1979 and in Burnie on 13 April 1984 provides a point to point contact facility whereby a Telefinder subscriber carries a lightweight pocket receiver which emits an audible 'Beep' when it receives a signal broadcast from a paging radio transmitter. The alerted customer then takes some pre-arranged course of action

<sup>(</sup>a) At 30 June.

<sup>(</sup>b) Includes telegrams lodged by telephone (i.e. phonograms).

such as contacting his office to receive information. At 13 June 1984, 1 157 paging units were in operation in the State.

### DEPARTMENT OF COMMUNICATIONS

### Use and Management of the Radio-frequency Spectrum in Tasmania

History

Before 1895, scientists in England, Germany and Russia had proved the existence of electromagnetic waves (or radio waves). In that year, Guglielmo Marconi discovered the means to transmit and receive these waves and thus, by means of the morse code, was able to exchange messages over distance and the history of wireless (later radio) began.

It is worthy of note, that Tasmania was to the fore in early radio experimentation. During the visit of the Duke and Duchess of Cornwall and York in the vessel RMS 'Ophir' in July 1901, the Longbeach lightstation at Sandy Bay (Hobart) communicated with the naval escort vessels St. George and Juno, thus establishing the first marine radiocommunication in Australia.

The initial step towards inaugurating wireless telegraphy as an official communication medium was taken with the passing of the Wireless Telegraphy Act in 1905 which, with amendments, is still the cornerstone of radio-frequency management. A new act of Parliament, the Radiocommunication Act (1983) has received royal assent but is yet to be proclaimed.

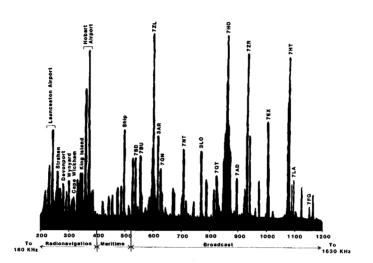
The first fixed land station in Australia licenced by the PMG's Department (7 June 1906) was located at East Devonport, Tasmania. It was owned and operated by the Marconi Wireless Company and was used to communicate with a similar station later established at Point Lonsdale, Victoria. On 12 July 1906, when both stations were fully operational, the Governor-General of the day sent the first Australian official wireless telegram to the Governor of Tasmania: 'The Commonwealth greets Tasmania and rejoices at the establishment of new means for knitting the people of Australia more closely together—Northcote.'

The most sanguine of the early developers could hardly have hoped that within some 78 years the new medium would advance so rapidly; neither could they have envisaged that the radio environment within the same span of years would encompass such activities as television, which makes extensive use of radio techniques, and radio astronomy by means of which modern scientists are probing the uttermost secrets of space.

### Radio Frequency Spectrum

Everyone on this planet is immersed in a sea of electromagnetic radiations vibrating at rates ranging from those of the penetrating cosmic and X-rays at the highest, down through light and heat to beyond the very low radio frequencies used to guide submarines in the remote depths of the oceans.

The radio-frequency spectrum is but a part of the total electromagnetic spectrum and is considered to be a national resource different from other resources such as fossil fuels, timber and minerals. Unless the radio-frequency spectrum is effectively managed, maximum use cannot be made of this resource.



Photograph of a spectrum analyser display taken at the Quoin Ridge Radio Monitoring Station near Richmond. It is a mid-day scan, displaying frequencies from 200 kHz to 1200 kHz labelled to identify the stations. The higher the line, the stronger the signal. Some weaker signals are from the mainland.

Modern technology allows the transmission, reception and separation of thousands of simultaneous radio services thus making possible all radiocommunication, radio broadcasting, radionavigation and the various space satellite services. Without this science, radiocommunication, which links all nations on this planet, newspapers would contain outdated information, sea and air-transportation would be paralysed, protection of life and property by police, fire, ambulance and related emergency services would be seriously hampered, commerce disrupted and public administration gravely affected; in short, economic, social, cultural and political life would change dramatically.

So many demands are made for use of radio-frequencies in the spectrum that planning for its efficient use is a major task. In Australia the Department of Communications is responsible for overall management of the radio-frequency spectrum and the administering of the national radio laws.

### Objectives of Radio-Frequency Management

The objective of radio-frequency management is to enable information to pass through the electromagnetic spectrum between all users in the most efficient and economic manner practicable with minimum interference between services.

### Mandatory Licensing Requirement

Before establishing and operating any type of radio communication equipment it is necessary to obtain a licence from the Department of Communications. Licence fees vary considerably from \$11 for a simple mobile outpost radio station to \$64 200 for an all-embracing Class 'E' earth-satellite station.

### Licensing Policy

An applicant for a radio communication service under the *Wireless Telegraphy Act* will be licensed, subject to appropriate technical and operating conditions, except where:

- frequencies are not available, or
- there is a potential detriment to the radio frequency spectrum, or
- there is a potential detriment to the public interest in the sense that public safety is prejudiced or manifestly unlawful activities are facilitated.

### Notice on Renewal and Conditions of Licence

A Wireless Telegraphy Act licence is for the specific period shown on the licence. Renewal is not, and cannot be, automatic due to changing community demands on the radio frequency spectrum. The Department will use its best endeavours to give adequate notice of non-renewal or changes in conditions of a licence on grounds other than non-compliance with the conditions of the licence. In any event, the Commonwealth accepts no liability for costs due to non-renewal or changes of licence conditions.

### Tasmania Radiocommunication Plan

An example of maximum utilisation of the radio-frequency spectrum is the Tasmania Radiocommunication Plan. Here, a relatively small portion of the radio-frequency spectrum is shared by a large number of government and semi-government bodies. This arrangement facilitates inter-communication between mobile units of the various emergency services during such events as bushfires and floods. The plan which is unique, was created by officers of the Department following radiocommunication difficulties experienced during the disastrous 1967 bushfires in southern Tasmania. At present approximately 3 000 mobile transceivers have access to the common disaster channel, with cost of equipment and site facilities for use with the plan estimated at \$5 million.

### Radio Communication Stations in Tasmania

The next table relates to radio communication stations only; particulars of broadcasting stations are specifically excluded and are dealt with in a subsequent section.

Number of Authorised Radio Communica	ation Stations, Tasmania at 30 June
(Two-way S	ervices)

Particulars	1979	1980	1981	1982	1983	1984
Aeronautical Mobile Service—						
Aeronautical ground stations	16	23	25	10	13	11
Aircraft	71	93	87	88	97	85
Total	87	116	112	98	110	96
Land Mobile Service—						
Base stations	889	953	1 058	904	967	994
Fixed stations	152	189	167	153	156	169
Fixed receiving stations	10	12	- 18	10	19	21
Land mobile paging receiver	1	49	49	21	123	150
Mobile stations	6 869	7 392	7 706	7 276	8 234	8 889
Remote control stations				2	77	103
Total	7 921	8 595	8 998	8 366	9 576	10 326
Maritime Mobile Service—						
Marine rescue stations	_		6	6	8	6
Shore stations	86	93	92	81	96	149
Ship stations	1 841	1 789	1 722	1 975	1 965	2 012
Total	1 927	1 882	1 820	2 062	2 069	2 167
Outpost Service—						
Fixed outpost stations	4	2	2	2	1	1
Mobile outpost stations	55	60	58	58	69	65
Total	59	62	60	60	70	66

continued next page

# Number of Authorised Radio Communication Stations, Tasmania at 30 June (Two-way Services)—continued

Particulars	1979	1980	1981	1982	1983	1984
Miscellaneous Services—						
Amateur (all classes)	376	406	452	490	526	550
Citizen band radio service	3 526	2 975	1 609	1.760	5 109	4 776
	3 320	2913	1 009			
Disaster stations (all categories)	_			277	2 849	2 827
Experimental stations	44	39	35	30	30	34
Handphones	755	735	541	178	734	671
Interior paging stations	47	54	60	38	47	46
Other	266	519	59	54	84	50
Total	5 014	4 728	2 756	2 827	9 379	8 954
Grand Total	15 008	15 383	13 746	13 413	21 204	21 609

### Interference Investigations

Interference as applied to radio and television reception refers to any electrical disturbance which interrupts or interferes with the complete enjoyment of the program. The interference problem has come to the fore to an increasing extent in recent years, owing to the sensitivity of modern radio and television receivers, together with the increasing use of industrial and domestic electrical devices.

An analysis of sources of interference has revealed that the following are the main causes: electricity supply lines, domestic apparatus, television or radio equipment, industrial equipment, scientific and medical equipment, traction services, ignition sources, propagation peculiarities, computer equipment, and radiocommunication equipment.

The number of interference complaints received throughout Tasmania during recent years is listed below:

### Interference Complaints, Tasmania

Year	Radio-broadcast (AM and FM)	Television (VHF and UHF)	Radiocommunication services	Total
1981-82	160	718	68	946
1982-83	200	648	39	887
1983-84	256	584	54	894

In some instances, more than one source of interference affected single complaints, whilst in others a number of complaints were due to a common source.

Pollution is a much used word today; it is considered that pollution of the radio-frequency spectrum by man-made devices is a major problem confronting the radio-frequency management authority in Tasmania.

### Radio-frequency Management Activities

The following activities enable the Department of Communications to control the radio-frequency spectrum:

- frequency allocations—the assignment of frequencies for use by Government, industrial, commercial and private organisations;
- radio monitoring and radio-frequency measurement to ensure technical and operating standards are met;
- determination of equipment standards;
- conduct of examinations for various Radiocommunication Certificates of Proficiency;
- inspection of installations to ensure that technical standards are adhered to;
- the issue of licences authorising the establishment and operation of radiocommunication stations, systems and services;

- investigation of illegal radiocommunication activity, leading to court action against offenders; and
- investigation of radio and television interference.

### RADIO AND TELEVISION SERVICES

Radio broadcasting and television falls within the jurisdiction of the Commonwealth Government and is one of the responsibilities of the Minister for Communications. Federal bodies which are directly involved include the Department of Communications, the Australian Broadcasting Tribunal, the Australian Broadcasting Corporation and the Australian Telecommunications Commission.

### **Types of Services**

Basically the Australian broadcasting and television system consists of three types of service comprising:

- national broadcasting and television stations funded by the Commonwealth Government;
- commercial broadcasting and television stations operated by companies under licence; and
- public stations operated by corporations under licence on a non-profit basis.

### Regulation

Provisions contained in the *Broadcasting and Television Act* 1942 govern the establishment and operation of all stations. The Department of Communications is responsible for planning of the overall system, for the submission of planning proposals for consideration by the Minister, for all matters relating to the technical operation of stations and for the investigation of interference to the transmission and reception of programs.

In relation to the national service, the Australian Broadcasting Corporation is required to provide programs for transmission over stations made available by the Australian Telecommunications Commission and to supply and operate the studio equipment necessary for the purpose. The Australian Broadcasting Tribunal is responsible for the licensing and supervision of the operation (other than the technical equipment) of all stations other than national stations. In particular, the Tribunal is required to conduct public inquiries into the granting of licences following the invitation of applications by the Minister, and into the renewal of licences, the setting of standards of broadcasting practices, alleged breaches of licence conditions and such other matters as the Minister may direct. Subject to the conduct of such inquiries, the Tribunal is empowered to grant, renew, suspend or revoke licences and to determine program and advertising standards applicable to licensed stations.

### The National Services

The national services (both radio and television) are provided by the Australian Broadcasting Corporation which has sole responsibility for program material; the actual transmitters are operated by the Australian Telecommunications Commission.

### **Commercial Broadcasting**

Commercial radio and television broadcasting stations are operated by companies under licences granted by the Australian Broadcasting Tribunal. Their technical operating conditions are determined by the Minister for Communications. The stations obtain income from the broadcasting of advertisements. The fee for a licence is an amount based on the gross earnings from advertising in accordance with a formula assessed on a scale ranging up to \$5 million and thereafter, by steps to a maximum of 5.5 per cent on gross earnings in excess of \$10 million.

### **Broadcasting Standards**

Commercial radio and television stations are required to maintain standards set by the Australian Broadcasting Tribunal. These standards include requirements relating to the acceptability of program material, duration and suitability of advertisements and, in the case of television stations, special provisions relating to children's programs.

### **Public Broadcasting**

On 5 April 1978 the Minister for Communications outlined the Government's policy objectives for public broadcasting. He stated that the system as a whole should '... cater for and reflect the widest possible spectrum of information, opinions, values and interests in Australian society ...' He said that the aim of public broadcasting was to ensure this diversity by serving specialised audiences and providing programming choices which the national and commercial sectors were not able to provide. The new public sector, therefore, must be complementary and supplementary to the national and private sectors.

### **Television Stations in Operation**

The next table gives details of the television stations in operation:

Television Stations in Operation, 30 June 1984

Call sign and channel	Area	Transmitter location	Height above sea level—top of aerial (metres)
	No	ntional	
ABT 2 ABNT 3 (a) ABKT 11 (a)		Mt Wellington Mt Barrow Gentle Annie Hill	1 344 1 457 245
	Con	ımercial	
TVT 6TNT 9	Hobart NE Tasmania	Mt Wellington Mt Barrow	1 323 1 419

<sup>(</sup>a) Transmits programs originating from ABT 2.

### Relay of Television Programs from Other States

Tasmania is linked with Victoria by a broadband radio link installed by the Australian Telecommunications Commisson which enables the direct relay of television programs from the mainland States.

### Microwave Links, Intrastate Relays and Translator Stations

The prime sources of programs in Hobart are the commercial and national studios which are linked to their Mt Wellington transmitters (TVT 6 and ABT 2) by microwave links; the commercial studio in Launceston feeds programs to its Mt Barrow transmitter (TNT 9) by the same method. As there is no national studio at Launceston, the transmitter on Mt Barrow (ABNT 3) relays the Hobart national programs through the broadband radio link. A similar service is also available to commercial stations.

Tasmania, due to its terrain, has areas where television reception direct from the Mt Wellington or Mt Barrow transmitters is either difficult or impossible. To provide good reception in such areas, translator stations, which are low-powered stations receiving signals from a parent station and re-transmitting on a different frequency to areas with poor reception, have been installed as shown in the following table. Translator stations cannot broadcast directly. The next table shows translator stations in operation and the areas served:

Television Translator St	tations in (	Operation at	30 June	1984
--------------------------	--------------	--------------	---------	------

	Parent	station	Local channel		
Area served	National	Commercial	National	Commercial	
Burnie	ABNT 3	TNT 9	4	10	
Derby		TNT 9		11	
East Devonport	ABNT 3	TNT 9	48	51	
Lileah	ABNT 3	TNT 9	8	6	
Maydena		TVT 6		8	
Queenstown-Zeehan	ABT 2	TVT 6	4	. 8	
Rosebery-Renison Bell	ABT 2	TVT 6	i	10	
Savage River-Luina	ABNT 3	TNT 9	Â	Ĩ	
Smithton	ABNT 3	TNT 9	4	11	
South Launceston	ABNT 3	TNT 9	i .	11	
St Helens	ABNT 3	TNT 9	Ô	7	
St Marys-Fingal Valley	ABNT 3	TNT 9	í	11	
Strahan	ABT 2		10		
Strathgordon	ABT 2	TVT 6	5	. 8	
Swansea-Bicheno	ABT 2	TVT 6	4	8	
Гагоопа		TVT 6	,	8	
Waratah	ABNT 3	TNT 9	2	11	
Wynyard	ABNT 3	TNT 9	ī	5 <b>A</b>	

### Radio Stations in Operation

The following table gives details of the radio stations in operation in Tasmania:

Radio Stations in Operation at 30 June 1984

Call sign	all sign Classification Location		Hours of service (weekly)
7ZL	National	Hobart	136.30
7ZR	National	Hobart	133.00
7NT	National	Launceston	140.00
7QN(a)	National	Queenstown	140.00
7FG(a)	National	Fingal Valley	140.00
7SH (a)	National	St Helens	140.00
7HO	Commercial	Hobart	168.00
HT	Commercial	Hobart	168.00
7AD	Commercial	Devonport	116.30
BU	Commercial	Burnie	118.30
EX	Commercial	Launceston	147.00
LA	Commercial	Launceston	168.00
QT	Commercial	Queenstown	112.00
'SD	Commercial	Scottsdale	116.30
THE-FM	Public	Hobart	144.00
HFC-FM	Public	Hobart	126.00
RGY-FM	Public	Geeveston	30.00
ABC-FM	National	<ul><li>Hobart</li><li>Launceston</li></ul>	168.00

<sup>(</sup>a) Transmits, in the main, programs originating from 7NT.

Tasmania's first FM (frequency modulated) station, 7CAE-FM Hobart, began regular broadcasting in February 1977 on a frequency of 92.1 MHz. The call sign of 7CAE-FM was changed to 7THE-FM in March 1982. A second FM station (7HFC-FM), operated by the Hope Foundation Ltd, commenced regular broadcasting during 1980 and a third (7RGY-FM), operated by Radio Geeveston Youth Inc., commenced regular broadcasting during 1983. The ABC's FM service was extended to Tasmania in August 1981.

Although there are areas of poor reception due to difficult terrain, most of Tasmania receives a satisfactory radio service from one or more of the above stations. In addition, the northern part of the State receives a service from some mainland stations. The structure and population distribution in the State has given rise to a regional pattern of radio stations with concentrations in Hobart and Launceston and outlying stations in the north-east, north-west and west.

#### **Further References**

ABS Publications Produced by the Tasmanian Office

Motor Vehicle Registrations, Tasmania (9303.6), monthly.
Motor Vehicle Census, Tasmania (9302.6), irregular.
Road Traffic Accidents Involving Casualties, Tasmania (9405.6), quarterly.
Road Traffic Accidents Involving Casualties, Tasmania (9406.6), annual.

ABS Publications Produced by the Canberra Office

Shipping and Cargo, (9211.0), quarterly.
Registration of New Motor Vehicles (Preliminary) (9301.0), monthly.
Motor Vehicle Registrations (9303.0), monthly.
Motor Vehicle Registrations (9304.0), annual.
Road Traffic Accidents Involving Fatalities (9401.0), monthly.

# **CHAPTER 18**

## PRIVATE FINANCE

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### Chapter 18

### PRIVATE FINANCE

### **BANKING AND EXCHANGE RATES**

### Types of Banks

### General

Banks in Tasmania can be classified by ownership as follows: Government—The Reserve Bank of Australia, the Commonwealth Development Bank of Australia, the Commonwealth Trading Bank of Australia and the Commonwealth Savings Bank; Private—the private trading banks and the private savings banks; and Trustee—The Savings Bank of Tasmania and the Launceston Bank for Savings.

For statistical purposes such a classification is not helpful since banks, both government and private, may be engaged in the same type of activity. Hence, the classification in use is one which groups banks according to their type of activity, not according to their ownership. The major banking statistics for the State are presented in two distinct series under the headings 'Trading Banks' and 'Savings Banks'.

### Trading Banks

The following four institutions in Tasmania are classified, for statistical purposes, as 'trading banks': Commonwealth Trading Bank of Australia, Australia and New Zealand Banking Group, National Commercial Banking Corporation of Australia Ltd and Westpac Banking Corporation.

### Savings Banks

In the 1950s, only three savings banks operated branches in Tasmania: Hobart Savings Bank (now the Savings Bank of Tasmania), Launceston Bank for Savings (both trustee savings banks) and the Commonwealth Savings Bank. The trustee savings banks date from early colonial days, the Launceston Bank opening in 1835, and the Hobart Bank in 1845.

In recent years, private trading banks have opened savings bank subsidiaries in the State, the current list of such banks being: Australian and New Zealand Savings Bank Ltd, Westpac Savings Bank, and National Australia Savings Bank Ltd.

Savings banks also offer cheque facilities to customers; however, for statistical purposes their cheque operations are included in 'savings bank statistics'.

### **Transactions of Trading Banks**

The accompanying table summarises the principal statistics relating to all trading banks in Tasmania for a five-year period. The following definitions apply:

- Deposits—a bank liabilities item. The figure is the average, for the year, of balances read at weekly intervals.
- Loans, advances and bills discounted, etc.—a bank assets item. The figure is the average, for the year, of balances read at weekly intervals.
- Debits to customers' accounts—mainly the total of all cheques drawn by customers during a given period. The figure is the average, for the year, of such weekly entries.

Particulars	1979-80	1980-81	1981-82 r	1982-83 r	1983-84
	Λ	lumber			
Branches open at 30 June	106	105	105	105	105
Deposits, Advances and I	Debits to Cusi	omers' Acccou	nts: Weekly Av	erages (\$'00	0)
Deposits (a)—					
Commonwealth and State					
Governments	26 871	5 580	6 092	6 400	10 692
Other—					
Fixed	203 817	235 466	319 171	399 031	365 360
Current—Bearing interest	22 937	24 226	22 662	21 510	27 704
Not bearing interest	172 284	179 985	183 062	181 927	196 745
Total	425 910	445 257	530 987	608 867	600 500
Loans, advances and bills dis-					
counted (a) (b)	345 930	394 596	432 701	441 385	448 367
Debits to customers' accounts (c).	256 249	287 683	318 201	337 704	366 752

<sup>(</sup>a) The average, for the month or year, of balances read at weekly intervals.

### Interest Rates and Security Yields

The next table shows the interest rates available on fixed deposits, the interest yield from treasury notes and the yield from government securities:

Interest Rates and Security Yields, Australia (Per Cent Per Annum)

Particulars	Rate					
	June 1981	June 1982	June 1983	June 1984		
Trading banks—						
Fixed deposits (less than \$50 000)—						
3 months and less than 6 months	10.50-12.25	13.00-15.25	10.00-13.20	10.10-12.50		
6 months and less than 2 years	11.00-12.25	13.00-15.00	11.25-13.25	10.50-12.50		
2 years to 4 years	11.25-12.00	13.00-14.50	11.00-12.00	10.75-12.50		
Fixed deposits (\$50 000 and over)—						
30 days to 4 years (a)	(b)	(b)	(b)	(b)		
Commonwealth Government securities yield—	' '	' '	(-)	1-7		
Non-rebateable bonds (c)—						
2 years	13.10	16.40	13.70	12.25		
10 years	13.10	16.40	r 14.85	13.85		
15 years (d)	13.10	16.40	r 15.00	14.15		
Treasury notes (issue yield)—						
13 week notes	13.31	15.47	11.93	11.24		
26 week notes	13.25	16.04	12.70	11.70		

<sup>(</sup>a) Subject to this maximum, actual rates are a matter between banks and their customers.

<sup>(</sup>b) Loans, advances and bills discounted, etc.; excludes loans to authorised dealers in the short-term money market.

<sup>(</sup>c) Covers all trading banks and in addition, the Rural Credits Department of the Reserve Bank and the Commonwealth Development Bank.

<sup>(</sup>b) Not subject to a maximum rate.

<sup>(</sup>c) Yields shown are average for week centred on last Wednesday of month and exclude effect of brokerage.

<sup>(</sup>d) Prior to June 1983, rates shown are for 20 years.

### Savings Banks

The following table summarises the principal statistics relating to savings banks in Tasmania. Deposits are compiled on a basis different from that used in the case of trading banks. 'Deposits lodged' is the total inflow of deposits during the year, and 'depositors' balances' is a single liability reading taken at the end of the year.

The number of operative accounts excludes school bank accounts and small inoperative accounts. The other items in the table relating to depositors' balances, etc., relate to all accounts including school bank accounts and small inoperative accounts.

All Savings Banks, Ta	ısmania
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Particulars	1979-80	1980-81	1981-82	1982-83	1983-84
Branches open (a)no.	167	168	168	169	172
Operative accounts (a)'000	695	718	741	775	809
Deposits lodged\$'000	1 487 842	1 791 657	2 182 955	2 641 164	3 219 374
Interest added\$'000	33 826	40 357	53 190	72 517	79 946
Excess of deposits over					
withdrawals\$'000	20 548	16 430	7 004	106 550	78 737
Depositors' balances (a)\$'000	642 129	698 917	759 111	938 178	1 103 459
Per head of population—					
Depositors' balances (a)\$	1 516	1 636	1 777	2 179	2 538

<sup>(</sup>a) At end of year.

The next table gives details of housing finance transactions by savings banks in Tasmania:

Savings Banks: Housing Finance Transactions, Tasmania

Period	purche	Loans a section or asses of wellings	estab	ases of lished lings	Alter- ations and ad- ditions	Total	loans pr appro individi	ation of reviously ved to uals for sing
	Number (a)	Amount (b) \$'000	Number (a)	Amount (b) \$'000	Amount \$'000	Amount \$'000	Number	Amount \$'000
1978-79	923	20 667	2 670	55 191	2 588	78 446	130	2 272
1979-80	815	18 414	2 317	48 985	2 496	69 895	136	2 348
1980-81	709	16 365	2 611	55 666	2 113	74 144	99	1 921
1981-82	527	12 177	2 082	45 180	1 926	59 283	108	1 685
1982-83	430	10 736	2 496	54 650	1 999	67 385	78	1 266
1983-84	699	18 823	3 513	83 851	2 155	104 829	131	2 887

<sup>(</sup>a) Number of loans for dwelling units approved for first mortgage finance only.

### Interest Rates

The next table shows the maximum rates of interest paid to depositors or charged to borrowers with home mortgages by The Savings Bank of Tasmania. Interest rates paid to depositors or charged to borrowers with home mortgages by the Launceston Bank for Savings, the Commonwealth Savings Bank and the savings bank subsidiaries of the private trading banks, may vary marginally from the rates shown in this table.

<sup>(</sup>b) Includes second mortgage finance to complete original purchase or construction.

The Savings	Bank	of Tasmania:	Maximum	Interest	Rates	(a)
		(Per Cent Pe				. ,

Date of change in rate	On savings accounts	On home mortgages (b)	Date of change in rate	On savings accounts	On home mortgages (b)
August 1980	4.00	10.50	February 1983	4.00	12.50
January 1981			October 1983		12.00
September 1981	4.00		February 1984		11.50
April 1982	4.00	13.50	September 1984	(c) 3.75	11.50

- (a) Operative from first day of month shown.
- (b) Effective for all loans to \$100 000.
- (c) This rate is effective on accounts to \$4 000. From \$4 001 the interest rate is 6.00 per cent.

### Overseas Exchange Rates

The next table shows average overseas exchange rates operative for recent periods:

Exchange Rates (a): Average for Period Shown, Overseas Currency Relative to Australian Dollar

Country	Unit of overseas currency	1979-80	1980-81	1981-82	1982-83	1983-84
Belgium (b)	Francs	32.87	37.85	50.32	46.58	49.47
Canada	Dollars	1.29	1.36	1.30	1.15	1.13
France		4.63	5.40	6.49	6.59	7.34
Germany, Federal Republic of	Deutsche marks	1.98	2.31	2.50	2.30	2.41
Hong Kong	Dollars	5.52	5.97	6.17	6.08	6.95
India	Rupees	8.83	9.23	9.85	9.13	9.48
Italy	Lire	916	1113	1363	1325	1465
Japan	Yen	257.77	246.67	252.53	231.12	210.35
Netherlands	Guilders	2.18	2.53	2.76	2.54	2.70
New Zealand	Dollars	1.13	1.23	1.36	1.33	1.37
Pakistan	Rupees	10.83	11.27	11.47	11.45	11.80
Singapore	Dollars	2.40	2.43	2.23	1.99	1.90
South Africa	Rand	0.91	0.90	1.09	1.04	1.07
Sri Lanka	Rupees	16.78	19.77	21.37	19.86	21.99
Switzerland	Francs	1.83	2.10	2.04	1.94	1.96
USA	Dollars	1.11	1.16	1.06	0.94	0.90
United Kingdom	Pound stg	0.50	0.51	0.59	0.58	0.62

<sup>(</sup>a) Average telegraphic transfer selling rates at Sydney. Average rates are not available for China, Malaysia and USSR; however, daily quotations are available on application to any trading bank.

### INSURANCE

### Life Insurance

Data on life insurance for years prior to 1983 can be found in previous issues of the *Year Book*. Later information can be obtained from quarterly, half-yearly and annual bulletins and reports published by the Office of the Life Insurance Commissioner.

### Fire, Marine and General Insurance

Information on insurance, other than life, is compiled from returns provided by insurance companies transacting fire, marine and general insurance business in Tasmania (including the Tasmanian Government Insurance Office). Statistics that follow relate to financial years of companies ending within the period shown and to policies *issued* in Tasmania and not necessarily to those for which the risk is situated in Tasmania.

<sup>(</sup>b) Two rates have been quoted for Belgium from 20.9.71. The rate shown for these periods is the financial rate used for trade transactions.

Premiums represent the full amount receivable in respect of policies issued and renewed in the year, less returns, rebates and bonuses paid or credited to policy-holders during the year. They are not adjusted to provide for premiums unearned at the end of the year.

Claims include payments made during the year, *plus* the estimated amount of outstanding claims at the end of the year, *less* the estimated amount of outstanding claims at the beginning of the year.

### Types of Insurance

The next table shows premiums and claims according to the class of insurance business transacted in 1982-83:

Fire, Marine and General Insurance, Tasmania Premiums and Claims for Each Type of Insurance, 1982-83 (\$2000)

Class of business	Premiums	Claims	Class of business	Premiums	Claims
Motor vehicle comprehensive			Boiler, engineering and		
(a)	24 399	15 068	machine breakdown	579	375
Employers' liability	24 405	19 303	Plate glass	374	252
Compulsory third party (b)	18 579	22 963	Professional indemnity		314
Fire and sprinkler leakage	4 945	3 483	Livestock	142	77
Houseowners' and house-			Contractors all risks		160
holders' comprehensive	14 441	9 175	Guarantee	84	32
Marine (hull and cargo)	1 497	1 461	Product liability		88
Personal accident	2 050		Fruit crop and hailstone		228
Loss of profits	514	96	Other (c)	4 571	1 744
Public liability	2 372	1 067			
Burglary	797	461			
			Total	100 348	77 254

<sup>(</sup>a) Includes motor cycles.

Ratio of Claims to Gross Premiums: The following table shows the ratio of claims to premiums for the more important classes of business over a three-year period:

Fire, Marine and General Insurance, Tasmania Ratio of Claims to Premiums (a) (Per Cent)

Class of business	1980-81	1981-82	1982-83
Motor vehicle comprehensive (including motor			
cycles)	76.2	73.8	61.8
Employers' liability	84.9	83.7	79.1
Compulsory third party (b)	226.8	287.8	123.6
Fire and sprinkler leakage	101.2	49.9	70.4
Houseowners' and householders' comprehensive	72.4	62.7	63.5
Marine (hull and cargo)	74.8	100.4	97.6
Personal accident	62.8	51.9	52.8
Loss of profits	74.8	3.1	18.7
Public liability	37.6	16.8	45.0
Burglary	68.4	53.5	57.8
Boiler, engineering and machine breakdown	73.8	104.5	64.8
All classes	95.5	103.4	77.0

<sup>(</sup>a) See beginning of section for definition of claims and premiums.

<sup>(</sup>b) Motor vehicles only. The Motor Accident Insurance Board accepted all rights, obligations and liabilities in respect of Compulsory Third Party Insurance from 1 October 1974.

<sup>(</sup>c) Includes aviation, loans, mortgages, leases and travel (including baggage).

<sup>(</sup>b) Motor vehicles only.

### INSTALMENT CREDIT AND OTHER FINANCING

### **Finance Companies**

Finance Companies: In these statistics finance companies are incorporated companies mainly engaged in providing, to the general public, the following credit facilities: instalment credit for retail sales, personal loans, wholesale finance, factoring, other consumer and commercial loans, financial leasing of business equipment and plant, and bills of exchange.

The definitions associated with the statistics are set out in considerable detail in the bulletin *Finance Companies: Assets, Liabilities, Income and Expenditure, Australia* (Cat. No. 5616.0) published by the Canberra Office of the Bureau.

Finance Companies: Transactions, Tasmania (\$m)

		(4111)			
				sumer and cial loans	
Year	Instalment credit for retail sales	Wholesale finance	Contracts including charges (a)	Contracts excluding charges (b)	Total all contracts
		Amount Finar	nced		
1978-79 <i>(c)</i> 1979-80 1980-81	55.5 46.9 44.3	123.1 128.0 136.8	55	9.0 5.4 9.7	227.6 230.3 240.8
1981-82 1982-83 1983-84	44.3 38.4 42.5	138.4 125.8 160.2	58 51 73	240.6 215.3 276.3	
	Collections ar	nd Other Liquia	lations of Balar	nces	
1978-79 (c) 1979-80 1980-81 1981-82 1982-83 1983-84	85.8 81.6 70.9 67.3 65.7 65.2	123.2 127.9 140.1 137.1 130.7 154.7	47.9 54.5 60.0 61.3 62.3 75.3	14.0 13.3 11.2 19.7 18.9 22.9	270.9 277.2 282.2 285.4 277.7 317.9
	Balances	Outstanding a	t End of Year		
1978-79 (c)	95.7 86.2 80.2 79.1 74.7 72.2	24.8 25.2 22.8 25.3 21.5 42.3	68.1 79.2 96.3 94.1 92.6 97.0	23.6 26.2 26.1 32.7 31.3 94.2	212.2 216.7 225.4 231.3 220.1 305.7

<sup>(</sup>a) Includes details of personal loans.

The value of capital goods (business equipment and plant) leased by finance companies, over a six-year period, is shown in the table below:

Finance Companies: Business Equipment and Plant on Lease, Tasmania (\$m)

Particulars	1978-79	1979-80	1980-81	1981-82	1982-83	1983-84
Value of goods leased during period		54.2	58.5	45.6	44.5	62.1
Balance outstanding at end of year		116.6	146.5	148.1	139.3	148.3

<sup>(</sup>b) Includes factoring.

<sup>(</sup>c) Figures for 1978-79 and subsequent years are not comparable with those for earlier years because of changes in the scope and coverage of the statistics.

In the following table the amount financed in respect of instalment credit for retail sales agreements (a single item in previous tables) is further classified by type of commodity:

Finance	Companies:	Instalment	Credit fo	r Retail	Sales,	Tasmania
		(	Sm)			

		Amoun	Cash				
Year Motor vehicles, etc.  New Used Total	Motor vehicles, etc.		House- hold and	T 1	collections and other liquid- ations	Balances outstand- ing at end	
	Total (a)	personal goods	Total	during year	of year		
1978-79	9.6	31.9	48.7	6.8	55.5	85.8	95.7
1979-80	8.4	26.6	39.8	7.1	46.9	81.6	86.2
1980-81	8.5	24.4	37.3	7.0	44.3	70.9	80.2
1981-82	7.8	23.9	35.4	8.9	44.3	67.3	79.1
1982-83	7.4	19.8	30.0	8.4	38.4	65.7	74.7
1983-84	9.2	20.1	31.4	13.3	44.6	65.2	72.2

<sup>(</sup>a) Total also includes new and used motor cycles, boats, caravans and trailers, motor parts and accessories.

### Instalment Credit for Retail Sales in Tasmania

### **Definitions**

The statistics cover operations of all types of instalment credit schemes which relate primarily to the financing of retail sales of goods, whether the credit is advanced by finance companies or other businesses. In general, the item 'instalment credit' is defined as relating to schemes in which repayment is made by regular pre-determined instalments. Types of schemes covered include hire purchase, time payment, budget account and personal loan schemes which relate primarily to financing of retail sales of goods. The term 'retail sales' relates only to retail sales covered by the censuses of retail establishments; other sales of goods to final purchasers (e.g. plant and equipment) are excluded.

Figures for amounts financed exclude interest, hiring charges, insurance, etc. Figures for balances outstanding and collections and other liquidations include these charges. Details are not available of these charges or of other items (e.g. rebates allowed for early payment, late payment charges and bad debts written off) which affect the reconciliation of the three main instalment credit series: amount financed, collections and other liquidations, and balances outstanding.

Statistics of amounts financed are classified by type of goods, defined as follows: motor vehicles, etc.—new and used motor cars and motor cycles, boats, caravans, trailers, and motor parts and accessories; and household and personal goods—furniture, furnishings and floor coverings, domestic refrigerators, electrical goods, radios, televisions, musical instruments, bicycles, motor mowers, clothing, etc.

# Instalment Credit for Retail Sales, Tasmania (a) (Hire Purchase and other Instalment Credit) (\$'000)

	Amount	Amount financed during period (b)					
Year	Motor vehicles, etc. (c)	Household and personal goods (c)	Total all goods	outstanding at end of period (d)			
	Financed by Fin	ance Companies					
1979-80 1980-81 1981-82 1982-83	39 814 37 286 35 388 30 034	7 116 6 969 8 873 8 328	46 930 44 255 44 261 38 362	86 164 80 220 79 132 74 726			

continued next page

# Instalment Credit for Retail Sales, Tasmania (a) (Hire Purchase and other Instalment Credit) (\$'000)—continued

	Amount	Amount financed during period (b)				
Year	Motor vehicles, etc. (c)	Household and personal goods (c)	Total all goods	outstanding at end of period (d)		
	Financed by O	ther Businesses				
1979-80		1 048	1 048	1 495		
980-81		1 142	1 142	1 580		
981-82		1 661	1 661	2 072		
982-83	· <del></del>	1 553	1 553	2 330		
	Financed by	all Business				
979-80	39 814	8 164	47 978	87 659		
980-81	37 286	8 111	45 397	81 800		
981-82	35 388	10 534	45 922	81 204		
982-83	30 034	9 881	39 915	77 056		

<sup>(</sup>a) Includes time payment, budget account, and personal loan schemes relating primarily to the financing of retail sales. (b) Excludes hiring charges, interest and insurance. (c) Types of goods included are defined under 'Definitions' preceding the table. (d) Includes hiring charges, interest and insurance.

### OTHER PRIVATE FINANCE

### **Registered Building Societies**

Permanent Societies: These societies are both savings and deposit-receiving institutions which advance funds for home building or purchase against the security of first mortgages. Those who invest by taking shares or by making deposits are in a separate category from those who borrow to build or buy a home. The following table summarises the transactions of permanent building societies:

### Permanent Building Societies, Tasmania (a)

Particulars	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83
	no.	no.	no.	no.	no.	no.
Operating societies	5	5	4	4	4	3
Investing shareholders	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
Borrowers	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
Liabilities— Share capital and subscriptions—						
Non-withdrawable	n.p.	n.p.	171 478	186 625	190 488	208 010
Withdrawable	110 075	136 854				
Reserves	2 890	3 215	3 614	4 182	4 417	4 926
Deposits	37 631	49 336	40 299	29 181	20 306	15 120
Loans	1 597	2 720	2 120	1 142	792	662
Other	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
Total	154 430	193 840	218 643	222 633	217 697	230 117
Assets—						
Loans on mortgage	117 131	141 075	164 591	172 414	162 432	154 198
Land and buildings	3 384	8 208	9 243	10 785	12 921	13 121
Other investments (b)	33 722	44 036	44 394	38 843	41 815	62 369
Cash on hand	151	253	285	361	345	234
Other	42	268	130	230	184	195
Total	154 430	193 840	218 643	222 633	217 697	230 117

<sup>(</sup>a) As there is no uniform accounting period for these societies, financial details are in respect of accounting years ending during the years shown; details relating to the number of shareholders, etc. are in respect of numbers at the end of accounting period ending during the year shown.

<sup>(</sup>b) Includes current accounts deposits and government securities.

Terminating Building Societies (Co-operative Housing Societies)

Terminating Building Societies are societies which, by their rules, are to terminate at a fixed date or when a result specified in their rules is attained. Societies issue members one class of share and require equated monthly instalments towards share capital from members; when a member borrows to build (and only a member may borrow) he is required to pay additional equated monthly instalments, such addition constituting interest only. The regular instalments in respect of share capital are calculated to amount, with interest, to the nominal amount of the member's shares over the life of the society (say 26 or 30 years). If the member takes out shares with a nominal value of \$20 000 then his borrowing ceiling is set at \$20 000—in other words the member takes out, in nominal share capital, the amount which he wishes to borrow for home-building. In effect, the member is contributing to a sinking fund for the liquidation of his loan. The terminating societies are termed 'co-operative'.

The maximum limit of an individual loan has been increased progressively from \$8 000 (prior to August 1969) to \$25 000 (from July 1978). Societies registered prior to 1 July 1978 were bound by previous limits; societies registered after 1 July 1978 may advance up to \$25 000 to each borrower.

The following table summarises the transactions of the terminating building societies operating in Tasmania:

Terminating Building Societies, Tasmania (a)

Particulars	1979-80	1980-81	1981-82	1982-83
Number of societies	143	108	71	72
Income—	\$'000	\$'000	\$'000	\$'000
Interest on loans	1 003	1 110	937	1 234
Other interest income	5	4	42	169
Other income	189	218	166	245
Total	1, 197	1 332	1 145	1 649
Expenditure—				
Interest paid	981	1 109	970	1 417
Other expenses	158	166	131	179
Total	1 139	1 275	1 101	1 596
Liabilities—				
Amounts paid on ordinary shares (b)	16	17	17	25
Accumulated funds (c)	299	350	317	144
Banks	1 672	1 644	2 985	3 027
Fund (d)	14 632	15 784	13 276	16 132
Others	121	111	93	82
Other liabilities	50	40	25	44
Total	16 790	17 946	16 713	19 452
Assets—				
Amount owing on loans (e)	16 473	17 628	16 428	19 098
Other assets	316	318	285	357
Total	16 790	17 946	16 713	19 452

<sup>(</sup>a) As there is no uniform accounting period for these societies, financial details are in respect of accounting years ending during the years shown.

<sup>(</sup>b) For actuarial terminating building societies, borrowing members' subscriptions have been offset against 'Amount owing on loans'.

<sup>(</sup>c) Includes accumulated surpluses and deficits.

<sup>(</sup>d) Refers to loans made to societies through the Commonwealth/State Housing Agreement.

<sup>(</sup>e) Net of borrowing members' subscriptions for actuarial societies.

### Credit Unions

The credit unions (co-operative credit societies) are registered under the Co-operative Industrial Societies Act 1928. Most credit unions have been established by trade unions (e.g. those serving teachers, hospital employees, etc.) and by church groups. Members contribute capital by taking out shares and making deposits. The aim of the societies is to make loans to members at low rates of interest.

The following table shows the societies' annual transactions:

Credit	Unions	Tasmania	(0)
CICUIL	CHIUDS.	тазшаша	(4)

Particulars	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83
Onesia	no.	no.	no.	no.	no.	no.
Operating societies	21 32 986	19 37 268	17 42 960	15 48 542	14 53 279	13 56 593
	\$'000	\$,000	\$'000	\$'000	\$'000	\$'000
Liabilities (at end of period)—						
Paid-up capital	322	362	426	483	528	607
Reserves, accumulated profits	977	1 308	1 673	2 102	2 582	2 993
Deposits	33 919	46 884	65 439	80 713	93 186	123 073
Other	999	1 998	2 235	3 033	3 259	3 164
Total	36 217	50 552	69 774	86t330	99 554	129 837
Assets (at end of period)—						
Loans	30 829	43 939	59 743	75 797	83 441	94 914
Cash and current deposits		4 613	6 208	4 559	r8 293	25 074
Other (b)	3 300	2 000	3 820	5 974	7 819	9 849
Total	36 217	50 552	69 774	86 330	99 554	129 837

<sup>(</sup>a) As there is no uniform accounting period for these societies, financial details are in respect of accounting years ending during the years shown; details relating to the number of shareholders, etc. are in respect of numbers at the end of accounting period ending during the years shown.

### The Parliamentary Pension and Superannuation Schemes

The Parliamentary Retiring Allowances Act 1955 was repealed and replaced by the Parliamentary Superannuation Act 1973, effective from 1 July 1973.

The previous scheme was purely contributive. It provided for a full basic rate pension for members who retired, or were defeated, after a minimum qualifying period of 15 years. Lesser rate pensions were calculated pro-rata to the length of service expressed as a fraction of 15 years; for service less than eight years, a member received only a refund of his contributions. The pension applicable was an amount equal to \$12.50 weekly, plus 34.5 per cent of Australian average weekly earnings per employed male unit (see Chapter 9 for details) in each year ended March.

### Parliamentary Superannuation Act 1973

Administration of the Fund, established under the Act, is vested in the Parliamentary Superannuation Trust which consists of the President of the Legislative Council, the Speaker of the House of Assembly and the Under-Treasurer. Contribution to the Fund is compulsory and is payable at the rate of 12 per cent of the member's parliamentary salary.

The annual rate of pension is calculated as a proportion of basic salary (see the section 'Salaries of Members of Parliament' in Chapter 3), multiplied by the ratio of the total parliamentary salary (excluding allowances) received during the period of service, to the total basic salary payable in respect of that period. The proportion of basic salary used in the calculation varies with the length of service (from 41.2 per cent of eight years service

<sup>(</sup>b) Includes investments and fixed assets.

to 70.0 per cent for 20 years or more service). Members who retire or resign with less than eight years service are only entitled to a refund of their contributions.

Pension Entitlement: A member is entitled to a pension in the following circumstances:

- if he ceases to be a member, for any reason, after 15 years service;
- if he has been a member for eight years or more but less than 15 years and resigns for reasons which the Trust certifies to be 'good and sufficient';
- if he has been a member for eight years or more but less than 15 years, his term of office expires and he fails to be re-elected for one of several reasons specified in the Act; or
- if he is forced to retire for medical reasons (under these circumstances a member with less than eight years service may be entitled to a pension calculated as though he had served for eight years).

These general provisions of contributions and rate of pension may be varied in cases where the Trust sees fit and which are in accordance with the Act. Any appeal against a decision of the Trust is heard by the Supreme Court of Tasmania.

The next table gives details relating to the State Parliamentary Superannuation Scheme for recent years:

State Parliamentary Superannuation Scheme, Tasmania (\$'000)

	(4 00	,,				
Particulars	1978-79	1979-80	1980-81	1981-82	1982-83	1983-84
Income	and Expen	diture Sta	tement			
Income—						
Members' contributions	172	184	199	219	218	241
Consolidated Revenue	1 509	1 509	2 018	2 018	518	218
Interest	136	253	378	618	912	929
Other	_	4	4	1	_	
Total	1817	1 950	2 599	2 8 5 6	1 648	1 388
Less expenditure—						
Pension payments	748	893	963	1 050	1 066	1 216
Administration expenses	1	2	1	3	6	5
Refund of members' contributions	_	43	31	75	9	
Total	749	938	995	1 127	1 081	1 221
Surplus transferred to accumulation						
Account	1 069	1 011	1 604	1 728	567	166
	Balance	Sheet				
Assets—						
Cash and short term investments	887	642	1 221	1 607	230	408
Accrued interest	58	120	151	223	r 260	260
Debtors	_	_	_	*****	59	59
Investments	1 450	2 650	3 650	4 885	6 735	6 735
Total	2 395	3 412	5 022	6714	7 284	7 461
Less liabilities—						
Current liabilities	24	31	36		3	14
Accumulation account						
Total funds	2 371	3 382	4 986	6714	7 281	7 447

### **Further References**

ABS Publications Produced by the Tasmanian Office

Friendly Societies, Report on, Tasmania (5603.6), annual.

ABS Publications Produced by the Canberra Office

Savings Banks (5602.0), monthly.

Major Trading Banks (5603.0), monthly.

Banking (5605.0), quarterly.
Housing Finance For Owner Occupation, (5609.0), monthly.

Finance Companies: Assets, Liabilities, Income and Expenditure (5616.0), annual.

Credit Unions: Assets, Liabilities, Income and Expenditure (5618.0), annual.

General Insurance (5620.0), annual.

Instalment Credit for Retail Sales (5631.0), monthly.

Permanent Building Societies: Assets, Liabilities, Income and Expenditure (5632.0), annual.

## **CHAPTER 19**

# AUSTRALIAN NATIONAL ACCOUNTS AND ECONOMIC STATISTICS

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### Chapter 19

# AUSTRALIAN NATIONAL ACCOUNTS AND ECONOMIC STATISTICS

### AUSTRALIAN NATIONAL ACCOUNTS

### Introduction

National accounting aims at providing a systematic summary of the transactions taking place in the economy, especially of those that relate to the production and use of goods and services, and to transfers of income or capital between sectors of the economy. National accounts statistics therefore provide a medium for describing or analysing the forces that drive and shape the economy.

Estimates of national income and expenditure are compiled by the Bureau and presented in a regular sequence of national accounts publications, in which the first estimates for the year just completed are successively revised, and additional detailed tables are issued as further information becomes available. The cycle begins in August with the Budget White Paper National Income and Expenditure (5213.0) which gives preliminary estimates for the year just completed and later estimates for the previous four years. The June quarter issue of Quarterly Estimates of National Income and Expenditure (5206.0) follows shortly after this with estimates for quarters for the year just completed and for the previous two years. Issues for subsequent quarters may revise the past quarterly estimates as they add additional quarters and may revise annual estimates for some items for the most recent years. The majority of revisions are the result of changes in principles and definitions rather than the correction of errors. Australian National Accounts, National Income and Expenditure (5204.0) is the most comprehensive national accounts publication; after estimates for this publication are finalised about February and sent for printing, mimeographed Preliminary Statements are issued which make available selected tables in advance.

### Description of National Income and Expenditure Accounts

A brief description of the conceptual basis of national accounts is given in the 1977 Year Book, but for a more detailed treatment of the concepts and structure of the Australian National Accounts, reference should be made to Australian National Accounts, Concepts, Sources and Methods (Cat. No. 5216.0)

### **Australian National Accounts Statistics**

The next table gives details of the items on the receipts side of the domestic production account for recent years. Estimates of gross domestic product at average 1979-80 prices are also included. Such estimates are described as *estimates at constant prices* and are designed to remove the direct effect of price changes from the original (current prices) estimates. Estimates at constant prices are largely based on the application of specially constructed price indexes. All estimates shown below are expressed in current prices unless otherwise stated. They have been taken from the 1982-83 issue of *Australian National Accounts*, *National Income and Expenditure* (5204.0) and are subject to revision.

	Gross	Domestic	Product.	. Australia .	r
--	-------	----------	----------	---------------	---

Particulars	1978-79	1979-80	1980-81	1981-82	1982-83
Wages, salaries and sup-					
plements\$m	55 448	61 839	71 749	83 001	92 102
Gross operating surplus—					
Trading enterprises—					
Companies\$m	12 062	14 012	16 148	17 115	17 635
Unincorporated enterprises\$m	13 225	14 588	15 155	16 337	15 230
Dwellings owned by persons .\$m	7 307	8 430	9 663	11 589	14 238
Public enterprises\$m	2 380	2 632	2 907	3 319	3 623
Financial enterprises\$m	2 498	2 864	3 378	3 661	4 194
Less Imputed bank service					
charge\$m	2 328	2 769	3 273	3 813	4 160
Gross domestic product at					
factor cost\$m	90 592	101 596	115 727	131 209	142 862
Indirect taxes less subsidies\$m	11 973	14 071	16 138	18 440	20 995
Gross domestic product \$m	102 565	115 667	131 865	149 649	163 857
Percentage increase in GDP (a)	13.5	12.8	14.0	13.5	9.5
GDP at average 1979-80 prices—	13.3	12.0	1	1010	,,,
Value\$m	113 849	115 667	119 940	123 503	121 741
Percentage increase (a)	5.2	1.6	3.7	3.0	-1.4
GDP implicit price deflator—	3.2	1.0	51,		***
Index number $(1979-80 = 100.0)$	90.1	100.0	109.9	121.2	134.6
Percentage increase (a)	7.9	11.0	9.9	10.3	11.1
	-				
Gross farm product\$m	6 493	7 449	7 097	7 318	5.732
Gross non-farm product\$m	96 072	108 218	124 768	142 331	158 125

<sup>(</sup>a) Over previous year.

Implicit Price Deflators: Indexes such as the gross domestic product implicit price deflators are obtained (to the base: year used as base for the constant prices series = 100) by dividing aggregate flows of goods and services measured at current prices by the corresponding estimates at constant prices and multiplying by 100. Implicit price deflators have limitations as indicators of price change as they can be affected by the physical composition of the aggregates and components to which they refer (they are not 'fixed weight' indexes), and by seasonal factors; the aggregates are subject to revision. These limitations render implicit price deflators of limited value in assessing quarterly price changes but are seldom of great significance with regard to annual national accounting aggregates.

The next table shows details for items making up the receipts side of the general government income and outlay account. Percentage increases are also shown for major items, the consumer price index (six state capitals combined), and the GDP implicit price deflator. The latter give some perspective to the monetary values (current prices) which are subject to growth due to price increases as well as being subject to real growth in the preceding table. In 1982-83 total 'General government receipts' as a proportion of gross domestic product was 34.2 per cent compared with 32.2 per cent in 1976-77.

General Government Income and Outlay Account, Australia: Receipts r

		•		-	
Particulars	1978-79	1979-80	1980-81	1981-82	1982-83
	Amou	nt (\$ million)			
Income from public enterprises	1 692	1 848	1 952	2 347	2 698
Interest, etc., received	1 047	1 295	1 577	1 846	2 079
Indirect taxes	12 605	14 886	17 135	19 537	22 301
Direct taxes on income—					
Companies	3 002	3 360	4 639	5 018	4 790
Households	12 797	15 040	17 543	21 224	22 967

continued next page

Particulars	1978-79	1979-80	1980-81	1981-82	1982-83	
	Amoun	t (\$ million)				
Withholding taxesOther direct taxes, fees, fines, etc.	114 850	141 816	161 840	205 942	259 1 003	
Total receipts	32 107	37 386	43 847	51 119	56 097	
Perc	entage Increa	se Over Prev	ious Year			
Indirect taxes Direct taxes on income—	16.3	18.1	15.1	14.0	14.1	
Companies, etc Households	-2.3 5.6	11.9 17.5	38.1 16.6	8.2 21.0	$-4.5 \\ 8.2$	
Total receipts	9.2	16.4	17.3	16.6	9.7	
Consumer price index (a) GDP implicit price deflator	8.2 7.9	10.1 11.0	9.4 9.9	10.4 10.3	11.5 11.1	

<sup>(</sup>a) Weighted average for the six state capital cities (all groups).

### National Accounts Statistics Relating to Tasmania

The following tables are included to provide information relating to household income and private final consumption expenditure within Tasmania during the last five years, together with an analysis of Tasmanian farm income during the same period.

Household Income is the total income, whether in cash or kind, received by persons normally resident in Australia. It includes both income received in return for productive activity (such as wages, salaries and supplements, incomes of unincorporated enterprises, etc.) and transfer incomes (such as cash social service benefits, interests, etc.). Household income also includes any property income received by non-profit organisations such as private schools, churches, charitable organisations, etc. That part of farm income accruing to unincorporated enterprises is included under household income.

Household Income: Tasmania r (\$ million)

Particulars	1978-79	1979-80	1980-81	1981-82	1982-83
Wages, salaries and supplements	1 458	1 673	1 904	n.y.a.	n.y.a.
Income of farm unincorporated enterprises	115	104	94	97	121
enterprises	167	184	184	195	189
Income from dwellings	70	74	80	93	113
Transfers from general government	291	315	358	424	505
All other income	190	220	273	343	403
Total household income	2 291	2 570	2 893	n.y.a.	n.y.a.
Less Income tax payable	349	408	456	521	n.y.a.
Other direct taxes, fees, fines, etc	21	19	20	23	n.y.a.
Consumer debt interest	33	37	45	57	n.y.a.
Transfers overseas					•
Household disposable income—					
Amount	1 888	2 106	2 372	n.y.a.	n.y.a.

Farm Income is the difference between the gross value of farm production (after stock valuation adjustment) and total costs (i.e. production costs plus net rent and interest paid and third party insurance transfers) incurred.

# Farm Income: Tasmania r (\$ million)

Particulars	1978-79	1979-80	1980-81	1981-82	1982-83
Gross value of farm production—					
Wool (including skin wool)	42	51	51	57	59
Livestock slaughterings	92	100	94	90	101
Grain crops	. 5	4	5	7	6
Fruit	19	19	19	21	28
Other crops	50	48	56	64	73
Other livestock products	48	43	49	61	72
Total	256	265	274	300	339
Less Stock valuation adjustment Less Production costs other than wages and depreciation—			_	_	_
Marketing costs	27	27	26	26	
Seed and fodder	14	19	22	24	119
Other costs	51	56	62	68	
Gross farm product at factor cost	165	163	164	182	220
Indirect taxes less subsidies	7	7	12	10	11
Gross farm product at market prices	172	170	176	192	231
Less Depreciation	12	14	14	21	
Less Wages, net rent and interest paid	12	1-7	14	21	93
and third party insurance transfers	35	43	51	63	,,
Less Indirect taxes less subsidies	. 7	7	12	10	11
Farm income	118	106	96	98	127
Percentage Increase (of T	otal) Over	Previous Y	'ear		
	73.5	-10.2	- 9.4	2.1	29.6

Private Final Consumption Expenditure covers the expenditure on goods and services by persons and expenditure of a current nature by non-profit organisations serving households. Goods and services purchased by businesses or general government are excluded. It excludes the purchase of dwellings and capital expenditure by non-profit organisations.

Private Final Consumption Expenditure: Tasmania r

		(3 11111					
Particulars	1977-78	1978-79		1980-81	1981-82	198	2-83
	19//-/0	19/0-/9	1979-80	1900-01	1901-02	Amount	Per cen
Food	251	290	327	374	419	464	18.1
Cigarettes and tobacco	34	39	42	45	50	54	2.1
Alcoholic drinks	92	99	109	122	137	149	5.8
Clothing, etc	137	149	156	175	193	210	8.2
Health	85	101	109	127	154	177	6.9
Rent	190	224	248	281	324	365	14.2
Gas, electricity, fuel	46	55	57	63	74	78	3.0
Household durables	137	138	138	160	179	190	7.4
Newspapers, books, etc	27	30	33	40	44	47	1.8
All other goods, n.e.i	67	82	88	100	114	120	4.7
Travel and communication	227	253	300	324	349	397	15.5
All other services	188	208	232	259	286	314	12.2
Total	1 481	1 668	1 839	2 070	2 323	2 565	100.0
Percen	tage Incre	ase (of To	tal) Over i	Previous Y	ears		
	10.6	12.6	10.3	12.6	12.2	10.4	

## **INCOME TAX RATES**

### Introduction

As noted in Chapter 4, income tax was first introduced in Australia in the colony of South Australia in 1884 and by 1915 had been adopted by all State governments and the Commonwealth Government. Uniform income taxation throughout Australia was first adopted in 1942 when the Commonwealth Government became the sole authority levying this tax. This continued until 1977-78 when, under new Commonwealth-State income tax sharing arrangements, each State was given the right to impose a surcharge or grant a rebate on personal income tax levied in its State. (However, no State government had exercised this option by the close of 1984.)

This section sets out income tax rates that apply to companies and details of the personal income tax system. (The 1977 Year Book included an outline of personal income tax in Australia for the period 1954-55 to 1976-77, pp. 654-662.)

Taxable Income: Expenses incurred in producing assessable income, certain specified deductions and losses incurred in previous years may be allowable deductions in calculating taxable income.

## **Company Income Tax**

For the income years 1976-77 to 1982-83, company tax rates were set at 41 per cent of taxable income for non-profit friendly society dispensaries and 46 per cent for all other companies. Since the 1983-84 income year, dispensaries have been taxed in the same way as other non-profit companies.

It is noted that the tax payable by companies during the financial year 1984-85 is based on income derived during the year ended 30 June 1984 or the substituted accounting period.

Public Unit Trusts

The Income Tax Laws Amendment Bill (No. 3) 1981 amended the income tax law to remove the taxation advantage sought by companies by placing income producing property in the hands of unit trusts. As a result, unit trusts created by this practice are now treated as if they were companies for taxation purposes; that is they are subject to the tax rate applicable to companies generally (now 46 per cent) and distributions to unit holders out of the income and profits of such trusts are taxed in the same way that they would be if they were dividends paid to shareholders of a company.

The new basis for taxing public unit trusts and their unit-holders was first applied for the 1980-81 income year where the trust was established after 11 July 1980. For trusts established on or before 11 July 1980, the amendments applied from the commencement of the 1983-84 income year.

Taxation (Unpaid Company Tax) Assessment Act 1982

This legislation may apply where, through sales of shares on or after 1 January 1972 and before 4 December 1980, control of a company passed to new owners and the company was rendered unable to pay income tax on the profits of the current and/or a prior year(s).

The broad aim of the legislation is to provide a formal means for collection of any unpaid ordinary company tax (i.e. income tax on taxable income) and unpaid undistributed profits tax, payable by companies stripped of pre-tax profits.

Retention Allowances of Private Companies

Under Division 7 of the *Income Tax Assessment Act*, a private company becomes liable to additional tax if it does not distribute a prescribed proportion of after-tax taxable income. The purpose of the provision is to maintain, as far as practicable, equity of treatment between shareholders in private companies and persons who operate unincorporated businesses as sole traders or partnerships. Without such a provision, extensive tax minimisation, by retention of profits in the private company's hands, would be expected

where the rate of company tax (currently 46 per cent) is well below the maximum marginal rate of tax on individuals (60 per cent for 1984-85).

The 1979-80 Federal Budget increased the retention allowance in respect of trading profits from 60 per cent in 1978-79 to 70 per cent from the 1979-80 income year, while the 1982-83 Federal Budget increased the allowance to 80 per cent from the 1982-83 income year, thus placing more funds at the direct disposal of private companies for the purposes of expansion and development. The allowance in respect of property income other than private company dividends remains at 10 per cent, while the allowance in respect of private company dividend income remains at zero.

### Personal Income Tax

The 1977-78 Federal Budget (introduced on 16 August 1977) included provisions for significant changes to the personal income tax system. A new tax rate scale was introduced which was used as the basis for calculating PAYE deductions from 1 February 1978. The general concessional rebate of \$676 was abolished; the only concessional expenditure to attract a rebate was that in excess of \$1590 at a reduced rate of 32 cents in the dollar. The actual effective rates of tax for 1977-78 were a composite of those for this new scheme and the pre-Budget scheme based on indexation of the 1976-77 tax scale (details are set out in the 1978 Year Book). The maximum amounts that could be included as concessional expenditure for specified types of expenditure, dependant rebates and the sole parent rebate remained unchanged. The marginal ('standard') tax rates applying from 1 February 1978 were: nil (up to an income of \$3750); 32 cents in the dollar (on each dollar in the range \$3751 to \$16000); 46 cents in the dollar (\$16001 to \$32000); and 60 cents in the dollar (\$32001 and over).

For 1978-79, half tax indexation was applied to the tax brackets (see the 1980 Year Book for further details). In addition, a tax surcharge was applied—all tax rates (apart from the zero rate) were increased by 1.5 cents in the dollar (i.e. an increase of 4.7 per cent in the standard rate—from 32 cents to 33.5 cents in the dollar).

No tax indexation adjustment was applied for the 1979-80 income year and in addition, a surcharge of 1.07 cents in the dollar was applied to the normal rates (32, 46 and 60 cents in the dollar). (Details are included in the 1980 Year Book).

For 1980-81, half indexation was applied to the tax brackets (see the 1981 Year Book for further details) resulting in them being indexed upwards by 3.8 per cent.

Half indexation of 3.8 per cent was again applied in the 1981-82 tax brackets (see the 1982 Year Book for further details). In addition, from 1 November 1981, new arrangements applied for zone rebates. While the basic rebates for Zone A and Zone B remain unchanged, the part of the rebate relating to children increased from 25 per cent to 50 per cent of relevant dependant rebates for people in Zone A and from four per cent to 20 per cent for those in Zone B.

No tax indexation adjustment applies for the 1982-83 and 1983-84 income years but the lower tax brackets and some dependants' rebates were adjusted. In addition, a difference in the method of taxing non-residents of Australia was introduced.

### 1984-85 Personal Income Tax Rates

The following table shows tax scales applying for the 1984-85 income year in respect of a resident of Australia:

### Income Tax Rates 1984-85 (a)

Total taxa	ble income(b)						
Not less than	Not more than	Tax on total taxable income(c)					
4 596 12 501	- 19 500	Nil Nil + 26.67¢ for each \$1 in excess of \$4 595 \$2 108.2635 + 30¢ for each \$1 in excess of \$12 500 \$4 208.2635 + 46¢ for each \$1 in excess of \$19 500					
28 001 35 001	- 35 000 - 35 788	\$8 118.2635 + 47.33c for each \$1 in excess of \$28 000 \$11 431.3635 + 55.33¢ for each \$1 in excess of \$35 000 \$11 867.3639 + 60¢ for each \$1 in excess of \$35 788					

- (a) As announced in August 1984 and represents an average of the 1983-84 scale and the new scale, applicable from 1 November 1984.
- (b) Gross income less expenses incurred in earning that income; subscriptions to trade, business or professional association or union and gifts to approved funds or institutions.
- (c) Subject to reduction (if applicable) by:
  - (i) 30 per cent of total concessional (rebatable) expenditure in excess of \$2 000;
  - (ii) rebates in respect of dependants, housekeeper or sole parent;
  - (iii) Zone A rebate of \$252 plus 50 per cent of rebates for dependants, including notional rebates for dependent children and students, Zone B rebate of \$42 plus 20 per cent of rebates for dependants, including notional rebates for dependent children and students; and special remote areas rebate of \$938 plus 50 per cent of rebates for dependants, including notional rebates for dependent children and students.
  - (iv) a rebate of 27 cents for each dollar of paid-up capital subscribed to certain petroleum exploration and mining companies;
  - (v) a rebate to social security and repatriation pensioners of \$250 reduced by 12½ cents for each \$1 of taxable income over \$5 533;
  - (vi) a rebate to social security unemployment, sickness or special benefits recipients of \$50 for single beneficiaries and \$75 for married beneficiaries, reduced by 12½ cents for each \$1 of taxable income over \$4 783 for a single beneficiary, and \$7 989 for a married beneficiary.

## Lump Sum Payments

With effect from 1 July 1983, the law relating to the taxation treatment of lump sum payments received on termination of employment or retirement, is as follows:

- (i) of that part of the payment relating to service prior to 1 July 1983, only 5 per cent will be included and taxed in the normal way;
- (ii) that part relating to after 30 June 1983, will be subject to rebate to limit tax to 30 per cent or 15 per cent on the first \$50 000, if received after the age of 55 years;
- (iii) bona fide redundancy payments, approved early retirement scheme payments, and invalidity payments are given concessional treatment as taxed as in (i).

### Non-Resident Tax Rates

Except for those in receipt of taxable social security and repatriation benefits, non-residents will not receive the benefit of the zero-rated bracket in the above table. Nor will they benefit from the rebates mentioned at (c)(iii) above.

## Medicare Levy Act 1983

This legislation introduces a Medicare levy to coincide with the commencement of the Medicare health scheme on 1 February 1984. The rate of levy applicable is 1 per cent for a full year and an interim rate for the 1983-84 income year of 0.416 per cent (i.e. 5/12ths of the full year rate). A maximum levy applies for any person or married couple, of \$291.20 for 1983-84 and \$733 for 1984-85.

The levy does not apply to taxable incomes below \$7 111 for single persons and \$11 804 for married couples. These thresholds are raised by \$1 330 for each dependent child or student maintained.

Persons entitled to full free medical treatment under other legislation may be exempt from the levy. Where such persons have dependants who are not also exempt, 50 per cent of the levy applies.

Dependant and Sole Parent Rebates

### Dependant and Sole Parent Rebate 1984-85

Dependant	Maximum tax rebate (a)
	\$
Dependent spouse or daughter-housekeeper (b)	1 030
Dependent spouse or daughter-housekeeper	830
Housekeeper (c)(b)	1 030
Housekeeper (c)	830
Parent or parent-in-law	749
Invalid relative	376
Sole parent (d)	780

- (a) Reduced proportionately if dependant was only dependent upon the taxpayer for part of the year. Each rebate, except the sole parent and housekeeper rebate, is reduced by one dollar for every four dollars by which the dependant's separate net income exceeds \$282.
- (b) Allowable where there is a dependent child under 16 or a student child under 25 in respect of whom rebates would have been allowable but for their replacement by family allowances. In 1984-85 the rebate also applies to a defacto spouse.
- (c) Allowable, subject to certain other conditions, only if no daughter-housekeeper or sole parent rebate claimed.
- (d) Allowable to a sole parent if neither a daughter-housekeeper nor a housekeeper rebate is claimed.

# Concessional Rebates

For the income years 1975-76 and 1976-77, a concessional rebate of 40 per cent of all allowable concessional expenditure applied, including minimum concessional tax rebates of \$540 and \$610 for 1975-76 and 1976-77, respectively. From the 1977-78 income year the rebate has been reduced to the respective standard rate of tax applied to the amount of concessional expenditure in excess of \$1590 until 1982-83 and \$2000 in 1983-84. Amounts of concessional expenditure in excess of \$2000 are subject to rebate at the standard tax rate of 30 per cent in 1984-85. The maximum amounts of concessional (rebatable) expenditure in respect of qualifying items for the 1984-85 income year are shown in the following table:

Personal Income Tax: Concessional Expenditure Limits, 1984-85

Particulars	Maximum rebatable expenditure \$
Rates and land taxes on principal residence	300 no limit 100 (per dependant)  1 200 250 (per student) 250 no limit 1/3 amount paid

- (a) In respect of a resident taxpayer and/or his 'dependants' who are residents.
- (b) Net of refunds.
- (c) For benefit of the taxpayer, or the spouse or child of the taxpayer.
- (d) In respect of the taxpayer's child or other dependant under 25 for whom the taxpayer is entitled to a rebate or notional rebate.

## **ECONOMIC CENSUSES AND SURVEYS**

### Introduction

Integrated economic censuses of Australian industry sectors commenced in 1968-69. The industry sectors covered initially were mining, manufacturing, electricity and gas, retail trade and wholesale trade. Other sectors subsequently included were agriculture and construction. The transport industry was surveyed for the first time in respect of 1983-84; results are expected to be available by late 1985. The frequency of collection and the method of coverage vary from annual censuses for manufacturing and mining, quinquennial censuses for retail, triennial surveys for agriculture, quinquennial surveys for construction, to wholesale trade where 13 years elapsed before the next collection was undertaken. In the 1972 Year Book, Appendix A gave a detailed description of the first Australian Integrated Economic Censuses, conducted by the Australian Bureau of Statistics for the 1968-69 financial year. The various industry sectors currently covered by integrated economic censuses and the Agricultural Finance Survey are each featured in this book; references are: Agriculture, Chapter 12; Mining, Chapter 13; Manufacturing, Chapter 14; and Retail Trade, Chapter 16.

In this section are set out the definitions of terms and concepts which apply to the integrated economic censuses. Also, the results of those industry sectors covered by censuses in recent years, together with survey results for the agricultural sector, are brought together to allow inter-sector comparisons to be made. Comparison tables showing the results of the five 1968-69 censuses may be found in Chapter 18 of the 1977 Year Book

### **Concepts and Definitions**

For the 1968-69 and subsequent economic censuses, uniform definitions and concepts have been used. This allows inter-sector comparisons (see later section) and increases the usefulness of the data derived from censuses for economic analysis and market research. Definitions and concepts used in these censuses are summarised below.

Establishment: Generally the establishment is the whole of each physical location operated by one enterprise, given that the main activity of the establishment is within the scope of the census. Usually only one return is submitted for each establishment classified to the industry of its main activity. The principal exception to the 'one return one establishment' rule is where a secondary activity at a location creates gross receipts in excess of a limit (currently \$3.8m). In such cases the secondary activity may have to be reported on a second return appropriate to its industry or its sector. In some other well-defined cases, particularly in the public sector, several locations are combined to form one establishment. Further detail is contained in the publications Australian Standard Industrial Classification, 1978 and Statistical Units for the Public Sector which are available from the ABS. Details for administrative offices and ancillary units (such as head offices, storage depots, garages, laboratories, etc.) which serve or administer establishments within the same enterprise but which are located away from them are treated as follows: if only one establishment is served or administered, then details are included in the establishment return; or if more than one establishment is served or administered, details are included on the enterprise return. Manufacturers' sales branches located away from the parent manufacturing establishment are treated as ancillary units provided they do not distribute goods to customers from their own holdings of stocks. If the unit does distribute from stocks in this manner then it is treated as an establishment and included in the wholesale sector.

Electricity and Gas Industries—the Exception. The single operating location is not suitable as a basis for enterprises engaged in producing or distributing electricity or gas. Therefore for electricity and gas industries, a special treatment was devised—the establishment unit for these industries consists of all locations operated by the enterprise in the one State.

Enterprise: This is broadly the operating legal entity and is the key unit for the collection of information. Where a number of legal entities operate as a group, owned or controlled by a single company, the enterprise is not the group as a whole, but each individual operating legal entity in the group.

Enterprise Group: Comprises a group of operating legal entities owned or controlled by a single company.

Value Added: Common to all sectors covered by integrated economic censuses is the following definition: value added equals turnover plus increase in stocks minus purchases, transfers in and selected expenses. The value added measure can then be aggregated for all establishments and sectors covered by the censuses without duplication. In broad terms, value added is the surplus from which establishments pay wages and salaries, interest, depreciation, rents and overheads. The remainder is available for appropriation as profits (after provision for income tax).

Turnover: The definition of turnover is as follows:

- In manufacturing and mining censuses: (a)
  - (i) sales of goods produced by the establishment:
  - (ii) sales of goods not produced by the establishment;
  - (iii) transfers out of goods to other establishments of the same enterprise; (iv) bounties and subsidies on production;

  - (v) all other operating income but excluding interest other than hire purchase interest, dividends and sales of fixed tangible assets; and
  - (vi) capital work done for own use or for rental or lease and from 1978-79, rent, leasing and hiring expenses.
- In retail and wholesale trade censuses:
  - (i) sales of goods (owned by the enterprise);
  - (ii) transfers out of goods to other establishments of the same enterprise (applies only to wholesale);
  - (iii) selling and purchasing commissions received (applies only to wholesale);
  - (iv) all other operating income but excluding items specified in (a) (v) above; and
  - (v) goods withdrawn from stock for own use (as fixed tangible assets, or for rental or lease).

Purchases and Selected Expenses: Are defined as follows:

- In manufacturing and mining censuses:
  - (i) the value of purchases of materials, fuels, electricity and gas, and wrapping and packaging materials is supplemented by the value of transfers in from other establishments of the enterprise;
  - (ii) purchases of goods for resale are included as well as purchases for own use in production; and
  - (iii) selected expenses comprise repair and maintenance expenses, charges for sub-contract and commission work, outward freight and cartage, motor vehicle running expenses and sales commission payments.
- (b) In retail and wholesale trade censuses:
  - (i) the value of purchases of goods for resale is widened to include purchases for both wholesale and retail trade, no matter whether the establishment is primarily a retailer or a wholesaler;
  - (ii) the value of purchases also includes purchases of materials for manufacturing to cover cases where the retail or wholesale establishment has this secondary activity; and
  - (iii) selected expenses comprise those specified in (a) (iii) above plus purchases of wrapping and packaging materials, and electricity and gas (see item (a) (i) in preceding manufacturing and mining group for the reason for this addition).

Stocks: Are the total held by the establishment and may therefore include some stocks held for secondary activities, e.g. a manufacturing establishment may have, in its stocks figure, merchanted goods held or a retail establishment may include in its return, stocks held for wholesaling and manufacturing.

Transfer Values: Transfers, both in and out, are confined to transfers of goods; the term is further narrowed to mean transfers between establishments of the same enterprise. Provision exists for recording transfers in all census sectors except retail trade and here the instruction requires purchases to be reported inclusive of transfers in, but net of transfers out. Thus, transfers are taken into account in arriving at value added since transfers out, as just defined, are a part of turnover and transfers in are a part of purchases and selected expenses.

Employment, Salaries and Wages: In accordance with the new concept of treating the establishment as a whole, all employees are entered, including those working in administrative offices and ancillary units which serve only the one associated establishment.

Fixed Capital Expenditure: The general basis for collection is: purchases of new and second-hand assets less sales of second-hand assets. (For establishments of multiestablishment enterprises, transfers from other establishments of the enterprise are treated as purchases, and transfers to such establishments are treated as sales.) The dissection of fixed capital expenditure comprises expenditure on: motor vehicles; land and buildings; and plant and machinery. A further distinction is made between new assets and second-hand assets.

### Industrial Classification

The Australian Standard Industrial Classification (ASIC) (Preliminary 1969 Edition) was adopted for use in the 1968-69 and subsequent economic censuses. The 1978 Edition of ASIC was used for economic censuses from 1977-78. ASIC defines the industries for which statistics are collected in the censuses and allows the scope of the individual censuses to be defined without gaps or duplications between them. It also identifies the statistical units (establishments, enterprises, etc.) and lays down standard rules for identifying and coding them to industries of the classification. A detailed description of ASIC may be found in the ABS publication ASIC, Australian Standard Industrial Classification, 1978 Edition Vol. 1: The Classification (1201.0).

### Agricultural Sector Financial Statistics

From 1968-69, the ABS has progressively developed agricultural industry finance surveys to obtain: firstly, details of farm expenditure; and, more recently, a wide range of financial data on a compatible basis to that available for industry sectors covered by the integrated economic censuses. The coverage of the 1974-75 and subsequent Agricultural Finance Surveys has consisted of a randomly selected sample of agricultural enterprises (classified to ASIC Subdivision 01). Results of these surveys have been used to calculate estimates covering all agricultural enterprises. A complete agricultural sector economic census of all agricultural enterprises has not been conducted, nor is one proposed, because of the high cost involved.

The concepts and definitions used are basically the same as those outlined above for the integrated economic censuses. Additional notes are set out below:

Value Added: When determining the 'increase in stocks' only livestock is taken into account because of its relative significance and the difficulties associated with including other farm stocks.

Turnover: Turnover of agricultural enterprises includes proceeds received during the year (which do not necessarily relate to the production of that year) from the sale of crops, livestock and livestock products, and other miscellaneous revenue. Miscellaneous revenue includes both sundry agricultural proceeds (such as proceeds from insurance recoveries, agistment, livestock service, artificial insemination, government relief payments, agricultural services such as contract shearing, harvesting, etc.) and also receipts from any non-agricultural activity of the enterprise.

Purchases and Selected Expenses: Include cash payments made during the year for goods and services including marketing expenses; purchases of livestock, feed, fodder, fertiliser, chemicals and veterinary supplies and services; payments for electricity, fuel, water and drainage; payments to contractors; repairs and maintenance to motor vehicles, machinery, equipment, buildings, structures and fences; motor vehicle registration and insurance; insurance of plant; payments for agistment, etc.

### Construction Sector Statistics

A sample survey of private construction establishments was conducted for the first time in 1978-79. The scope of the survey included all private sector establishments and ancillary units predominantly engaged in construction activities, i.e. those establishments classified to the industries in Division E of the ASIC.

At the same time, details were collected from all public sector establishments classified to construction activity but, because of different definitions, the public sector construction activity data cannot be validly aggregated with private sector construction establishment data to give 'total construction'. Construction sector data included in the accompanying tables are, accordingly, in respect of the private sector only.

# **Comparisons Between Industry Sectors**

Principal items from economic censuses conducted in recent years are shown below:

Selected industry Sectors, Tasinama												
-	of establishments and year	Number of establish- ments at 30 June	Persons employed at 30 June	Wages and salaries	Value added							
			no.	\$'000	\$'000							
Agriculture (a)—	1976-77	5 768	n.a.	n.a.	77 900							
	1977-78	5 793	n.a.	n.a.	87 200							
	1980-81	5 685	n.a.	n.a.	115 100							
Construction (b)—	1978-79	1 446	7 601	55 703	103 036							
Mining (c)—	1978-79	66	4 356	63 122	183 963							
•	1979-80	69	4 527	75 878	247 396							
	1980-81	70	4 672	84 699	192 703							
	1981-82	63	4 266	90 963	169 688							
	1982-83	55	3 652	85 531	205 807							
Manufacturing—	1978-79	552	26 329	266 099	549 372							
· ·	1979-80	543	26 429	298 196	653 770							
	1980-81	558	26 488	346 551	713 445							
	1981-82	555	25 256	370 167	713 091							
	1982-83	528	23 853	387.714	695 135							
Retail (d)—	1979-80	3 299	19 973	121 341	267 869							

# Selected Industry Sectors, Tasmania

- (a) Agricultural financial data are based on surveys of agricultural enterprises. The count of units involved is consequently the number of enterprises.
- (b) Private sector only. These figures are based on sample surveys and are subject to sampling errors.
- (c) Census results exclude 'small' tin miners whose sales were less than \$20 000.
- (d) Excludes all bread and milk vendors and single establishment enterprises with turnover of less than \$50 000.

As already noted, value added is a measure that can be aggregated and directly compared for all establishments and industry sectors for which it has been determined, without duplication. The following table compares the industry sectors of agriculture, mining and manufacturing on the basis of value added for recent years:

### Selected Industry Sectors, Tasmania: Value Added

	198	80-81	198	81-82	1982-83		
Industry sector	Value added	Per head of mean population	Value added	Per head of mean population	Value added	Per head of mean population	
	\$m	\$	\$m	\$	\$m	<i>\$</i>	
Agriculture (a)	115.1	271	n.a.	n.a.	n.a.	n.a.	
Mining	192.7	453	169.7	396	205.8	478	
Manufacturing	713.4	1 678	713.1	1 664	695.1	1 613	
Retail	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	

(a) These figures are based on sample surveys and are subject to sampling errors. 'Standard errors' indicating the reliability of the estimates are included in the Canberra Office publications Agricultural Industries, Financial Statistics (Cat. No 7507.0) and Private Sector Construction Establishments: Details of Operations by Industry Class (Cat. No. 8720.0).

### **Further References**

#### ABS Publications Produced by the Tasmanian Office

Retail Establishments and Selected Service Establishments, Details of Operations by Industry Class, Tasmania (8622.6), irregular, 1979-80 released February 1982.

Retail Establishments and Selected Service Establishments, Industry and Commodity Details for

Statistical Retail Areas, Tasmania (8623.6), irregular, 1979-80 released March 1982.
Retail Establishments and Selected Service Establishments, Hotels and Accommodation, Tasmania (8624.6), irregular, 1979-80, released March 1982.

Retail Establishments and Selected Service Establishments, Commodity Sales and Service Takings, Tasmania (8625.6), irregular, 1979-80, released July 1982.

Retail Establishments and Selected Service Establishments, Industry and Commodity Details by Size of Establishments, Tasmania (8626.6), irregular, 1979-80 released August 1982.

### ABS Publications Produced by the Canberra Office

ASIC, Australian Standard Industrial Classification, (irregular, 1978 edition released June 1978)— Vol 1: The Classification (1201.0)

Vol. 2: Alphabetic Index of Primary Activities (1202.0)

Australian National Accounts National Income and Expenditure (Advance Release) (5201.0), annual.

Australian National Accounts—National Income and Expenditure (5204.0), annual.

Quarterly Estimates of National Income and Expenditure (5206.0), quarterly.

Australian National Accounts—Gross Product by Industry (5211.0), annual. Australian National Accounts—Concepts, Sources and Methods (5216.0).

National Income and Expenditure (a Federal Budget Paper) (5213.0), annual.

## Other Publications

AUSTRALIA, PARLIAMENT. Commissioner of Taxation, Reports (annual). (Parl. Paper, Canberra). TREASURER (Federal). Budget Papers No. 1 and No. 11 (annual). (AGPS, Canberra).

Inquiry into the Structure of Industry and the Employment Situation in Tasmania, Report by Sir Bede Callaghan CBE (AGPS, Canberra, 1977). (Commissioned by the Commonwealth Government in December, 1976).

# Appendix A

## TASMANIAN STATISTICAL DIVISIONS

### Introduction

In chapter 2, the State of Tasmania was briefly described by analysing its terrain in terms of physiographic regions. For statistical purposes, the State is also analysed in divisions but these do not necessarily coincide with physiographic regions, one reason being that the former are basically groupings of whole municipalities. The traditional Tasmanian statistical divisions, in use for over 50 years, were exposed to searching scrutiny in 1971 and the decision was taken to introduce a new structure, to be applied to statistics in respect of periods commencing on or after 1 July 1972.

# History of Statistical Divisions

The grouping of administrative areas into divisions for statistical purposes can be found in annual volumes of the Statistics of Tasmania dating back to the nineteenth century. The administrative areas included: police districts, registration districts, electoral districts, and municipalities. The boundaries of these areas were subject to periodic changes. The Local Government Act 1906 provided a basis for the whole State coming under uniformly constituted local government and gradually the divisional grouping of administrative areas was confined, in official statistics, to municipalities. As a result of this Act, fixed local government area (municipality) boundaries were delineated in 1907 by a commission specially set up for the purpose. The new boundaries have remained broadly unchanged since 1907 although there have been numerous relatively minor boundary changes. One exception is that the old municipalities of 'Hobart', 'Queenborough' and 'New Town' were combined to form the new municipality of 'Hobart' in 1919. The names of several municipalities have also been changed since 1907.

In 1919, groupings of local government areas used were very similar to those still used in 1971; in some series Hobart, Launceston and Glenorchy were separately specified as components of an 'Urban Division' distinct from the region in which each was located.

The basis for these 1919 groupings can only be inferred since no specific criteria were specified in the records. The Western Division clearly combined the 'west coast' mining municipalities into one entity; the Southern Division seemed to be based on orcharding, small fruit and hop areas; while the South Eastern Division was allied more with pastoral and grazing areas. In short, the main determinant may well have been similarity of rural activity (with the Western Division a special case because of its mining activity).

After the 1966 population census, a new division was formed with the title Hobart Division, comparable with similar capital city divisions in other States; its boundaries were drawn wide enough to encompass the expected expansion of the inner urban area for a period of 20 to 30 years. Apart from this, the broad divisional structure in 1971 was very much the same as it had been in 1919.

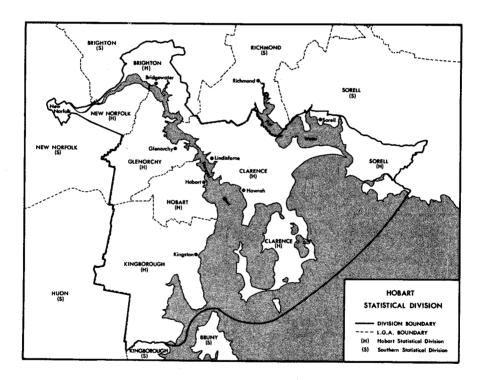
In 1972 a new statistical division structure, using the three principal urban centres of influence as a basis, was designed. The three urban centres and their areas of influence were: Hobart—South and South-East; Launceston—North and North-East; and Burnie-Devonport—North-West and West. The following divisional structure was then adopted: with Hobart as focus—Hobart and Southern Divisions; with Launceston as focus—Northern Division split into Tamar and North Eastern Subdivisions; and with Burnie-Devonport as focus—Mersey-Lyell Division split into North-Western and Western sub-divisions.

# **Outline of the Present Structure**

The divisions in the new structure are as follows:

### Hobart Division

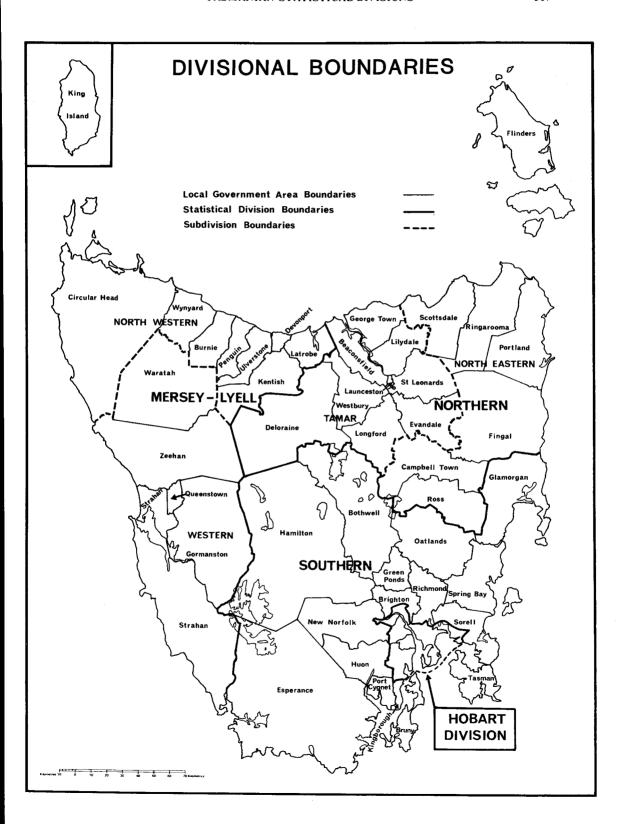
This Division comprises Hobart and Glenorchy Cities, the municipality of Clarence, and parts of four other municipalities: Brighton, Kingborough, New Norfolk, and Sorell. The Division is Tasmania's principal industrial region and the administrative focal point. The Hobart Division boundaries were drawn wide enough to contain the expected outward growth of the inner urban area for a period of 20 to 30 years.

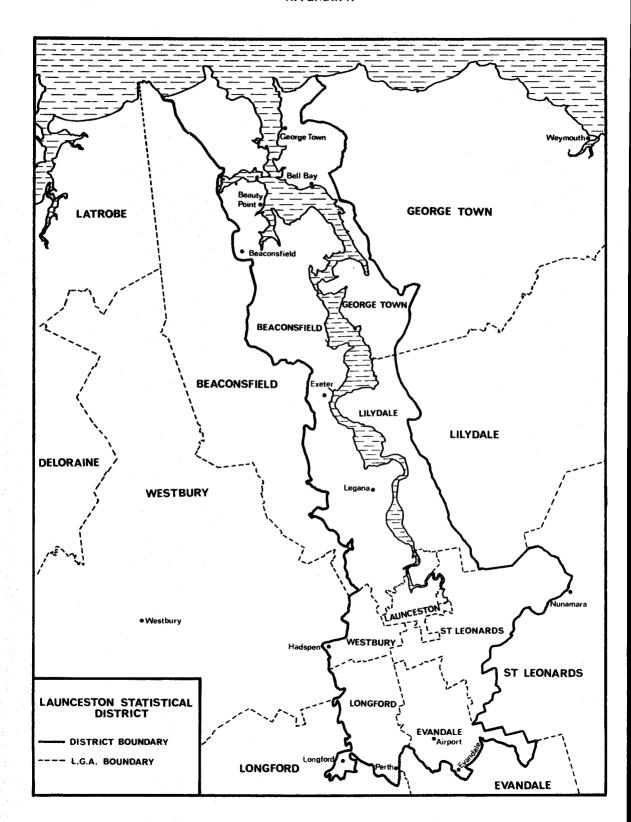


One important component of the Hobart Division is Urban Hobart, defined as the densely settled contiguous parts of the cities of Hobart and Glenorchy, and of the municipalities of Clarence and Kingborough. The boundaries of Urban Hobart and of the Hobart Division do not conform with borders defining local government areas. (The details of these boundaries are given in Chapter 5 'Demography' under 'Populations Centred on Hobart, Launceston and Burnie-Devonport'.)

## Southern Division

Comprises the southern local government authority areas which have Hobart as their urban focus. Predominant activities include orcharding, sheep and cattle grazing, forestry and timber processing.





### Northern Division

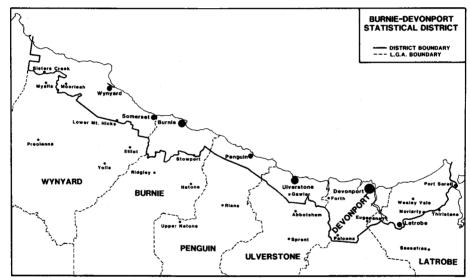
The Northern Division is the region with Launceston as its urban focus.

(i) Tamar Sub-division. This is the region dominated by the Tamar Valley. In the centre of this area is Launceston and its suburbs (known as Urban Launceston). This Sub-division includes several major manufacturing industries, port facilities of the northern region and agricultural, pastoral, dairying and forestry industries.

Launceston Statistical District: A new boundary delineating the Launceston Statistical District was drawn for the purpose of presenting results of the 1976 Population Census. The boundary was drawn to contain the area of expected urban growth over the next two decades and includes the City of Launceston and parts of seven other municipalities as shown in the previous map.

Urban Launceston is defined for statistical purposes as the City of Launceston plus the contiguous urban parts of the following municipalities: Lilydale, St Leonards, Evandale, Westbury and Beaconsfield.

(ii) North-Eastern Sub-division: Comprises the outer seven municipalities of the Northern Division. Principal activities include agriculture, dairying, sheep and cattle grazing, forestry and some mining.



Mersey-Lyell Division

This division encompasses the north-west and western portions of the State. The region has a twin urban focus of Burnie-Devonport.

(i) North-Western Sub-division: Comprises the municipalities stretching along Bass Strait from Latrobe to Circular Head plus Kentish and King Island. The Sub-division includes several major manufacturing industries and is a principal agricultural, pastoral, dairying and forestry area for the State.

Burnie-Devonport Statistical District: As with the Launceston Statistical District the Burnie-Devonport Statistical District was drawn to contain the area of expected urban growth over the next two decades. It includes the whole of the municipality of Devonport and parts of the municipalities of Wynyard, Burnie, Penguin, Ulverstone and Latrobe.

(ii) Western Sub-division: Contains Tasmania's western municipalities where mining activities predominate.

# Appendix B

### STATISTICAL SUMMARY

In the following pages, an historical summary of the more important statistics available that relate to Tasmania is shown. Only brief footnotes have been included and readers should refer to the relevant chapter of the Year Book for more detailed definitions. Naturally, the range of statistics for early years is very limited. Also, it should be borne in mind that perfect comparability over long periods of time is difficult to attain due to changes in definitions, scope of statistical collections, etc. While major breaks in series are shown, minor changes to series are not indicated and the statistics should be interpreted with this in mind.

Generally, the first year shown on each page is the earliest for which any series on that page is available. Due to space constraints, earlier details for some series are given only for either every five or ten years. Items included have been arranged in chapter order.

(Chapter 4)

Aggregate Net Loan Expenditure and Public Debt, Tasmania

		Aggreg	ate net loai	ı expenditui	e to end of	year		n Lu	4	nnual interest	
				Purpose				Public debt at end of		at current	
Year	Railways and transport	Hydro- electric works	Roads, bridges, harbours	School buildings and University	Housing advances and construc- tion	Other	Total	year (a) (at mint par of exchange)	Amount	Average rate	
	\$'000	\$'000	\$'000	\$.000	\$.000	\$,000	\$'000	\$'000	\$'000	%	
1890 1900 1910-11 1920-21 1930-31	6 508 7 820 8 866 11 702 13 866	3 994 7 692	3 354 5 352 7 258 10 390 13 540	238 334 488 848 1 312		2 282 2 986 5 034 12 302 16 568	12 382 16 492 21 646 39 442 53 390	12 866 17 022 22 156 37 552 46 778	n.a.	n.a.	
1930-31 1940-41 1950-51	14 520 20 958	13 018 40 448	14 412 16 214	1 986 4 694	902 9 946	19 392 33 468	64 230 125 728	56 332 J 114 066	n.a.	3.1977	
1960-61 1961-62 1962-63 1963-64 1964-65 1965-66 1966-67 1967-68 1968-69 1969-70	31 126 31 418 31 296 34 410 34 984 35 789 36 088 36 910 37 170 40 503	181 578 195 206 208 706 222 905 239 419 255 919 273 919 293 919 314 644 337 769	35 076 39 144 42 942 47 704 51 171 55 593 57 486 58 774 59 563 60 686	27 266 30 450 34 048 38 342 42 395 46 832 50 858 54 964 59 387 64 853	29 536 29 190 28 990 28 577 28 244 27 970 27 692 27 217 27 230 26 469	87 422 96 684 106 621 113 570 122 653 133 325 146 021 162 408 176 586 189 370	392 004 422 092 452 603 485 508 518 866 555 428 592 064 634 192 674 580 719 650	354 558 379 252 404 594 432 311 462 302 491 658 524 918 560 893 599 736 637 407	n.a. 17 064 19 523 19 790 21 706 23 987 25 940 27 777 30 040 32 939	4.3845 4.3948 4.4585 4.4634 4.5890 4.7693 4.8432 4.8879 4.9517 5.1163	
1970-71	42 169 47 199 58 643 67 609 81 033 (b) 15 186 13 714 14 730 15 466 16 033	362 269 388 269 410 629 433 629 456 854 486 554 517 554 540 554 557 204 569 879	61 706 62 636 63 176 63 886 64 504 65 559 71 407 75 526 80 526 85 338	70 544 78 952 90 753 102 567 114 219 132 917 156 939 178 496 197 373 215 364	26 104 31 497 36 837 36 228 35 771 37 475 40 694 42 558 48 754 58 922	204 250 224 757 240 516 261 248 288 832 316 692 370 933 417 616 469 324 515 499	767 042 833 310 900 554 965 167 1 041 213 1 054 383 1 164 561 1 269 481 1 368 648 1 461 035	665 397 705 271 749 583 787 618 833 862 753 797 811 012 870 097 922 559 969 948	36 203 39 202 41 620 45 922 49 005 53 748 60 437 68 233 73 604 80 205	5.3928 5.5220 5.5300 5.8300 6.4100 7.1300 7.4500 7.8400 7.9783 8.2700	
1980-81	16 136 16 239 17 207 19 398	581 179 604 979 589 979 589 979	89 618 93 156 98 054 102 883	230 191 236 320 252 777 270 511	67 759 78 113 82 788 82 122	568 297 609 374 695 466 760 135	1 553 180 1 638 181 1 736 271 1 825 028	1 020 804 1 071 606 1 114 397 1 154 510	91 494 105 333 116 405 124 349	8.9600 9.8300 10.4500 10.7700	

<sup>(</sup>a) Expenditure under Commonwealth and State Housing Agreements is excluded from Public Debt.
(b) The Tasmanian Government Railways were taken over by the Australian National Railways Commission from 1 July 1975.

(Chapter 4)

# Consolidated Revenue Fund: Revenue and Expenditure, Tasmania $\it (a)$ (\$`000)

					Aggregate net
	Year	Revenue	Expenditure	Budget result	deficit at end of
				····	year
391		1 889	1 827	+ 63	497
901		1 652	1 741	- 89	487
	***************************************	1 940	2 034	- 94	<b>49</b> 0
		2 169	2 129	+40	450
912-13 <i>(b)</i> .		2 413	2 192	+ 221	229
		2 476	2 470	+ 6	223
		2 488	2 768	<b>– 280</b>	503
		2 753	2 681	+ 72	432
		2 739	2.826	- 87	519
		3 006	2 919	+ 87	432
		3 164	3 289	125 27	557
		3 630 5 379	3 657 5 430	- 27 - 51	584 1 451
930-31		5 210	5 700	400	1.042
	***************************************	5 219 4 771	5 709 5 314	490 543	1 942
		5 044	5 155	- 343 - 110	2 485 2 596
		5 396	5 492	- 110 - 95	2 691
	***************************************	5.744	5 983	- 238	2 930
	***************************************	6 235	6 495	- 259 - 259	3 189
		6 977	6 887	+ 90	3 099
	***************************************	7 280	7 266	+ 14	3 086
		7 230	7 281	- 52	3 138
939-40		6 111	6 106	+ 5	3 133
		5 843	6 206	- 363	3 496
		6 717	6714	+3	3 493
942-43		6 581	6 800	- 219	3 712
		6 997	6 937	+ 60	3 651
	•••••••••••••••••••••••••••••••••••••••	7 313	7 351	- 38	3 690
		7 867	8 068	- 201	3 891
245 40		9 014	9 147	- 132	4 023
340 40	***************************************	10 156	10 204	- 48 402	4 071
		11 288 13 882	11 691 14 165	- 402 - 283	4 473 4 756
950-51			16.304		
		15 831 20 386	16 324	- 493	5 249
		22 922	21 490 23 526	1 104 604	6 353 6 957
		26 502	26 840	- 338	7 294
	***************************************	29 877	30 614	- 737	8 032
		34 389	35 792	- 1 403	9 434
	***************************************	37 889	39 543	- 1 655	11 089
957-58		43 210	43 228	- 18	11 107
		45 520	45 518	+ 2	11 105
959-60		50 542	50 657	- 114	11 219
960-61		54 054	54 167	- 113	11 332
961-62		61 191	61 352	- 161	11 493
		64 018	64 019	- 1	11 493
		69 167	69 021	+ 147	11 346
		76 012	76 465	<b>- 452</b>	11 799
		84 453	85 585	- 1 132	12 931
		91 486	93 248	- 1 762	14 693
		100 463	102 413	- 1 951 2 015	16 644
		109 526 120 619	111 540 121 004	- 2 015 - 385	18 659 19 044
70-71		125 920	129 207	- 2 378	21.422
		135 829 156 432	138 207 160 237	- 2 3 / 8 - 3 805	21 422 25 226
	***************************************	181 866	185 998	- 3 803 - 4 132	29 358
	***************************************	206 947	210 097	- 4 132 - 3 150	32 508
	***************************************	268 522	282 065	- 13 544	46 052
975-76		322 091	317 947	+ 4 144	41 908
976-77		396 617	395 033	+ 1 583	41 908
		444 263	450 706	- 6 443	48 351
		495 822	492 961	+ 2861	45 490
979-80		560 192	563 917	- 3 725	49 214
		620 307	627 441	<b>- 7 133</b>	56 348
81-82		683 231	717 628	- 34 397	90 745
982-83	***************************************	764 990	772 735	- 7 745	98 490
983-84		853 107	855 006	- 1899	100 389

<sup>(</sup>a) From 1947-48 until 1971-72, the items 'Revenue' and 'Budget result' are shown adjusted according to the Special Grant Adjustment. (b) System of annual Commonwealth Special Grants introduced.

## STATISTICAL SUMMARY

(Chapter 4)

# Gross and Net Loan Expenditure, Tasmania

Year	Gross expendi- ture	Net expendi- ture	Revenue deficit funded (a)	Net loan expendi- ture per head of population	Year		Gross expendi- ture	Net - expendi- ture	deficit funded (a)	Net loan expendi- ture per head of population
	\$'000	\$'000	\$'000	\$	,		\$'000	\$'000	\$'000	\$
1900 to 1904-05 (b)	543	473		2.68	1950-51	***************************************	30 802	27 465	402	96.86
1905-06 to 1909-10 (b)	571	519	_	2.78	1951-52		34 047	30 047	283	103.28
1910-11 to 1914-15 (b)	1 147	1 039		5.40	1952-53	***************************************	40 152	26 137	493	86.38
1915-16 to 1919-20 (b)	2 004	1 549	_	7.84	1953-54		31 816	27 544	1 104	89.00
1713-10 to 1717-20 (17)	2 00 -	1 347		7.04	1954-55		35 310	29 378	604	93.96
1920-21	6 181	5 435		25.68	1955-56	***************************************	35 213	27 048	338	84.98
1921-22	5 377	4 292		19.98	1956-57	***************************************	23 544	22 039	737	67.88
1922-23	3 422	2 307	699	10.68	1957-58	***************************************	23 390	21 666	1 403	33.26
1923-24	2 752	1 492		6.88	1958-59	***************************************	27 610	25 112	1 655	74.16
	1 907	496	_	2.30	1959-60		29 130	26 443	18	76.84
	2 226				.,	***************************************				
1925-26		1 138		5.30	1040 41		33 865	30 611	_	87.38
1926-27	2 290	659	-	3.08	1960-61		32 521	30 088	112	84.60
1927-28	2 068	809		3.78	1961-62		33 332	30 511	113	84.58
1928-29	2 059	698		3.22	1962-63			32 905	161	90.32
1929-30	2 932	294		1.34	1963-64		35 354	33 352	101	90.65
					1964-65	***************************************	35 816	36 573		98.46
1930-31		(c) 1 651		7.40	1965-66		39 411	36 636	306	98.15
1931-32	1 319	193		0.86	1966-67		40 161	42 128	1 132	111.62
1932-33	887	<b>– 147</b>	_	0.64	1967-68		46 054	40 164	1 762	105.02
1933-34	1 050	238	_	1.04	1968-69		44 458	45 069	1 /02	116.67
1934-35	1 572	723		3.16	1969-70		49 411	43 009		110.07
1935-36	3 717	2 000	678	8.66						
1936-37	3 996	1 684		7.00	1970-71		52 079	47 393		121.75
1937-38	3 785	1 701		7.32	1971-72		73 037	66 268	4 350	169.22
1938-39	3 699	1 479	_	6.22	1972-73		76 813	67 243	2 378	170.67
1939-40	3 628	1 806		7.52	1973-74		73 947	64 603	3 805	162.60
					1974-75		90 060	76 056	7 282	189.15
1940-41	4 231	2 268	363	9.40	1975-76		98 818	81 369	-	200.32
1941-42	3 581	1 430		5.96	1976-77	r	126 223	110 085	9 399	265.26
1942-43	3 001	1 002		4.14	1977-78			104 732	_	250.80
1943-44	5 218	3 350	219	13.70	1978-79			99 074	1 250	235.44
1944-45	3 587	1 806	910	7.32	1979-80	r	121 805	92 214		217.69
1945-46	3 540	1 590	710	6.36						
1946-47	5 899	2 725	239	10.70	1980-81	r	114 790	90 579	6 057	212.03
1947-48	8 361	6 528	132	24.98		r		82 606	7 133	192.20
1948-49	11 051	9 013	488	33.82	1982-83			94 379	34 397	218.17
1/10/1/		9 884	48	99.02	1/02-03			84 886	4 000	194.11

 <sup>(</sup>a) These amounts are included in both Gross and Net Loan Expenditure. The figures shown are a complete record of funded deficits since 1900.
 (b) Annual average for the five-yearly period shown.
 (c) Includes \$1 233 000, the amount re-appropriated to provide for certain deferred revenue charges.

(Chapter 4)

### Local Government Finance, Tasmania

		Value of ratable property			ordinary :	e Fund— services and endertakings	Loan Fund					
Year	Land value (a) (b) (c)	Total capital value (a) (b)	Assessed annual value	Revenue (d)	Expendi- ture (d)	Loan raisings	Expendi- ture	Total debt (b)	Annual interest liability			
***************************************		\$ million	\$ million	\$ million	\$'000	\$'000	\$,000	\$.000	\$'000	\$'000		
1929-30		46.17	101.40	5.51	1 954	1 956	227	212	6 502	n.a.		
1939-40		46.16	109.82	6.10	2 174	2 192	212	230	6 712	300		
1949-50		50.73	134.70	9.02	3 694	3 696	1 400	1 423	7 219	267		
1950-51		55.86	155.35	10.24	4 283	4 327	1 860	1 594	8 534	304		
1951-52		63.43	187.66	11.43	5 357	5 351	2 554	2 558	10 453	372		
1952-53		69.93	224.91	12.87	6 024	6 048	2 184	2 166	11 900	444		
1953-54		74.31	252.69	13.84	6 641	6 506	2 418	1 758	13 600	533		
1954-55		83.58	296.37	15.88	6 972	7 053	2 796	2 408	15 603	639		
1955-56		93.84	345.27	15.56	6 386	6 596	2 367	2 730	(e) 15 389	654		
1956-57		130.13	495.31	25.42	7 417	7 261	2 310	2 682	16 967	761		
1957-58	******************	140.55	553.90	28.23	7 998	7 904	4 024	3 237	20 192	944		
1958-59		164.66	653.48	33.41	8 837	8 837	3 685	3 541	22 979	1 111		
1959-60		179.03	739.35	37.31	9 781	9 762	5 232	4 671	27 144	1 337		

# Local Government Finance, Tasmania-continued

		Value	of ratable p	roperty	ordinary.	e Fund— services and indertakings	es and Loan Fund			
	Year	Land value (a) (b) (c)	Total capital value (a) (b)	Assessed annual value	Revenue (d)	Expendi- ture (d)	Loan raisings	Expendi- ture	Total debt (b)	Annual interest liability
		\$ million	\$ million	\$ million	\$.000	\$'000	\$'000	\$'000	\$,000	\$'000
1960-61		185.93	808.21	40.04	10 867	10 924	5 277	5 259	31 285	1 571
1961-62		193.52	870.08	42.89	12 097	11 779	6 159	5 658	36 181	$(f)\frac{13/1}{1515}$
1962-63	***************************************	216.01	942.88	48.62	13 765	13 256	5 268	7 212	39 842	1 897
1963-64		r 271.63	1 075.09	57.51	14 792	14 654	5 823	7 431	44 063	2 061
1964-65		290.52	1 140.40	61.27	16 250	16 176	6 237	6 354	48 368	2 209
1965-66		r 328.50	1 202.22	68.54	17 395	17 085	6 512	8 342	52 844	2 442
1966-67	***************************************	r 329.14	1 271.87	72.47	19 594	19 068	6 981	8 091	57 611	2 893
1967-68		r 351.66	1 350.44	86.35	21 235	20 858	8 183	9 364	62 821	3 186
1968-69	***************************************	r 375.02	1 452.38	95.57	23 478	22 790	7 633	8 616	66 922	3 496
1969-70		r 412.71	1 571.96	102.98	25 914	24 816	6 793	7 972	71 854	3 858
1970-71		r 442.45	1 691.37	107.78	28 236	27 195	6 964	7 494	75 752	4 149
1971-72		r 455.06	1 768.07	114.86	31 505	30 985	7 326	8 504	79 907	4 534
1972-73		r 484.13	1 874.17	124.61	37 000	34 552	8 151	9 668	84 781	4 865
1973-74		r 512.73	1 995.91	147.41	40 376	38 381	8 574	8 803	89 766	5 298
1974-75		r 620.86	2 317.03	165.47	52 313	51 830	12 260	12 677	97 892	5 951
1975-76		r 696.81	2 570.15	185.36	68 345	65 118	15 870	19 368	109 655	7 071
1976-77		r 932.13	2 902.51	218.86	76 376	69 204	17 775	20 579	122 950	8 655
1977-78	r	1 156.90	3 531.99	260.11	82 607	77 476	18 595	23 135	136 366	10 283
1978-79	r	1 402.51	4 241.72	344.62	92 130	86 286	19 872	24 120	149 934	12 017
1979-80	<i>r</i>	1 869.21	5 678.18	397.69	112 077	113 171	34 949	n.a.	157 300	13 326
1980-81	<i>r</i>	2 096.56	6 448.32	435.46	121 769	116 239	51 337	n.a.	165 832	14 410
1981-82		2 316.28	7 055.27	480.36	137 432	137 549	65 152	n.a.	171 755	14 418
1982-83		2 604.81	7 701.97	524.69	162 245	161 077	76 402		171 733	16 090 16 518
				224.37	102 243	101 0//	70 402	n.a.	1/4 044	10 318

<sup>(</sup>a) State Government valuation. (b) At 30 June. (c) Prior to 1977-78 figures are 'unimproved capital value'. (d) Excludes loans. (e) As from 1955-56, the loan debt of Hobart and Launceston Corporations for tramways has been excluded and treated as a direct liability of the Metropolitan Transport Trust. (f) From 1961-62 actual interest payments.

# (Chapter 5)

Summary of Population at Census Dates, Tasmania (a) (b)

		200012		C	ensus da	te			
Particulars	April 1921	June 1933	June 1947	June 1954	June 1961	June 1966	June 1971	June 1976	June 1981
Population—	*******								
Males	107 743	115 097	129 244	157 129	177 628	187 390	196 442	201 512	208 641
Females no.	106 037	112 502	127 834	151 623	172 712	184 045	193 971	201 312	210 316
rersonsno.	213 780	227 599	257 078	308 752	350 340	371 435	390 413	402 868	
Masculinity (males per 100 females)no.	102	102	101	104	103	102	101	100	101
Average annual increase since previous Census—				•••	105	.02	101	100	101
Males %	1.0	0.6	0.8	2.8	1.8	1.1	1.0	0.5	0.7
Females %	1.3	0.5	0.9	2.5	1.9	1.3	1.0	0.8	0.7
Persons %	1.1	0.5	0.9	2.7	1.8	1.2	1.0	0.6	0.9
Age distribution of population-		0.0	017		1.0	1.2	1.0	0.0	0.0
Under 16 years no.	77 654	73 030	77 483	102 171	123 331	127 370	120 207	124 267	116 043
%	36.3	32.1	30.1	33.1	35.2	34.3	33.1	30.8	28.0
16 years and under 65 yearsno.	126 055			183 230		214 981	230 069	243 885	
%	59.0	60.9	62.2	59.3	57.1	57.9	58.9	60.5	62.3
65 years and overno.	10 071	16 054	19 670	23 351	27 008	29 075	31 037	34 719	42 540
%	4.7	7.0	7.7	7.6	7.7	7.8	7.9	8.6	9.9
Religions of the population-									
Church of England	112 222	105 220	123 158	147 407	160 101	144.000	1.00.000		
Methodistno.	27 171	26 470				166 023	169 089	158 748	151 207
Catholic (c)	35 465	33 189	33 358	38 236	42 236	43 084	42 173	37 107	19 906
Presbyterianno.	14 796		39 844	53 042	63 993	71 089	77 250	75 092	78 143
Baptist no.		13 194	12 644	15 607	16 757	17 498	17 281	14 899	11 575
Congregationalno.	5 332 4 543	4 666	5 374	6 293	7 227	7 759	8 039	7 940	7 965
Churches of Christ		3 963	4 007	4 425	4 193	4 530	4 134	3 266	1 790
Protestant (undefined)no.	1 935	1 892	2 039	2 267	2 507	2 701	2 500	2 188	2 110
Salvation Armyno.	2 271 1 357	1 979	1 661	2 157	1 975	1 924	4 243	3 455	5 217
Uniting Church		1 142	1 612	1815	2 3 1 6	2 661	3 176	2 880	3 202
Other Christian no.	2.502	2 420				· · · · · ·	_		17 668
Total Christian	3 597	3 530	4 518	8 238	11 229	13 058	16 510	18 667	18 631
Non-Christian				279 487	311 534		344 395		317 414
	245	87	173	256	268	485	561	779	1 263
	520	373	797	796	1 766	2 275	993	2 223	11 162
	399	159	506	516	775	2 020	44 464	27 624	36 222
No Reply no.	3 927	31 727	27 387	27 697	35 997	36 328		47 998	52 896

## STATISTICAL SUMMARY

(Chapter 5)

## Summary of Population at Census Dates, Tasmania (a) (b)-continued

		Census date									
Particulars	April 1921	June 1933	June 1947	June 1954	June 1961	June 1966	June 1971	June 1976	June 1981		
Conjugal condition of the population—											
Never married—	22 444	(0.500	73 371	07.453	117 299	120 164	121 323	115 665	109 604		
Under 15 years of age	73 444	68 590	53 912	54 890	58 039	64 365	65 213	70 229	80 067		
15 years of age and overno.	54 297	61 009	127 283	152 342	175 338	184 529	186 536	185 894	189 671		
Total never married	127 741	129 599	114 625	132 342	157 110	167 421	181 855	185 056	189 442		
Married no.	76 482	86 014						19 340	21 362		
Widowedno.	8 874	10 954	12 933	14 030	15 563	16 959	18 621				
Divorced no.	118	416	1 319	2 002	2 329	2 526	3 401	5 868	10 855		
Not stated no.	565	616	918	. 577	(e)	(e)	(e)	(e)	(e)		
Birthplaces of the population											
Australia no.	196 268	215 213	247 379	282 491			350 150				
New Zealand no.	1 356	1 201	1 030	1 112	1 128	1 237	1 550	1 801	2 421		
United Kingdom and Republic of											
Irelandno.	12 734	9 588	7 123	14 113	16 741	19 101	22 513	22 913	23 289		
Netherlands	9	11	13	2 340	3 556	3 367	3 183	2 9 1 6	3 008		
Germanyno.	389	238	171	1 794	2 223	2 016	2 009	1 886	1 936		
Italyno.	37	92	64	974	1 536	1 448	1 485	1 423	1 343		
Other European	512	334	325	4 535	5 789	6 033	6 184	5 970	5 530		
Other birthplaces	2 475	922	973	1 393	1 889	2 651	3 339	4 095	9 806		
Other orthograces	2 413	722	7,5		. 007	2 00 1	2 003				

Population, Arrivals and Departures, Tasmania

				Estim	ated popula	tion (a)					4
	Year	Total	Mean:	Mean:		Totals at 3	I December				Annual rate of
		at 30 June	year ended 30 June	year ended 31 Dec.	Persons	Males	Females	Mascu- linity (b)	Arrivals (c)	Depart- ures (c)	increase of popula- tion (d)
		no.	no.	no.	no.	no.	no.		no.	no.	per cent
1820		n.a.	n.a.	n.a.	5 400	n.a.	n.a.	n.a.	n.a.	n.a.	8.00
1825	***************************************	n.a.	n.a.	n.a.	14 192	10 979	3 213	342	n.a.	n.a.	21.26
1830		n.a.	n.a.	n.a.	24 279	18 108	6 171	293	n.a.	n.a.	11.35
1835		n.a.	n.a.	n.a.	40 172	28 749	11 423	252	n.a.	n.a.	10.59
1840		n.a.	n.a.	n.a.	45 999	32 040	13 959	230	n.a.	n.a.	2.75
1845		n.a.	n.a.	n.a.	64 291	43 921	20 370	216	n.a.	n.a.	6.91
1850		n.a.	n.a.	n.a.	68 870	44 229	24 641	179	n.a.	n.a.	1.37
1855	***************************************	n.a.	n.a.	n.a.	69 962	38 680	31 282	124	n.a.	n.a.	0.32
1860		n.a.	n.a.	88 752	89 821	49 653	40 168	124	3 432	2 782	5.12
1865		n.a.	n.a.	93 111	93 967	50 549	43 418	116	3 597	3 691	0.90
1870	(e)	n.a.	n.a.	100 038	100 886	53 517	47 369	113	5 982	5 936	1.44
1875	***********************	n.a.	n.a.	104 000	103 739	54 678	49 061	111	6 535	8 083	0.55
1880		n.a.	n.a.	113 648	114 790	60 568	54 222	112	10 411	10 034	2.02
1885		n.a.	n.a.	127 763	128 860	67 712	61 148	111	14 822	15 228	2.33
1890		n.a.	n.a.	143 224	144 787	76 453	68 334	112	29 517	29 086	2.38
1895		n.a.	n.a.	153 701	154 895	80 485	74 410	108	18 767	19 357	1.35
1900		n.a.	n.a.	172 631	172 900	89 763	83 137	108	23 056	25 479	2.21
1905			183 834	184 478	186 385	95 947	90 438	106	31 116	33 311	1.52
1910			190 792	191 005	193 803	98 866	94 937	104	35 377	38 159	0.79
1915			196 320	196 238	197 536	98 653	98 883	100	39 767	44 764	0.38
1920		209 425	208 599	210 350	212 752	107 259	105 493	102	34 829	35 648	1.37
1925			215 997	215 552	219 364	110 172	109 192	101	40 227	43 757	0.70
1930			219 269	220 933	225 297	113 505	111 792	102	40 291	41 110	0.48
1935	******************	228 988	229 339	229 867	233 423	118 124	115 299	102	42 470	42 912	0.63
1936			230 689	231 426	235 773	119 038	116 735	102	49 478	49 452	1.01
1937	***************************************	233 203	232 651	234 463	239 570	121 136	118 434	102	52 514	51 468	1.61
1938			235 628	236 328	242 119	122 427	119 692	102	58 113	58 315	1.06
1939	***************************************		237 637	238 845	243 256	123 194	120 062	103	(f) 59 330	(f) 60 893	0.47
1940			240 023	241 134	244 002	123 650	120 352	103	(f) 51 672	(f) 53 644	0.31
1941			241 009	240 389	242 135	122 153	119 982	102	(f) 49 348	(f) 53 865	-0.77
1942			240 358	241 087	242 437	122 440	119 997	102	(f) 42 463	(f) 44 834	0.13
1943			241 704	242 860	244 253	123 067	121 186	102	(f) 20 152	(f) 21 272	0.75
1944	***************************************	245 616	244 178	245 618	246 889	124 293	122 596	101	n.a.	n.a.	1.08
1945			246 971	248 596	250 280	125 854	124 426	101	n.a.	n.a.	1.37
1946	***************************************	251 998	250 309	252 192	254 570	128 007	126 563	101	(g) 24	(f) 159	1.71
	(e)		254 553	257 636	267 936	135 195	132 741	102	(f) 49 920	(f) 40 833	5.25
1948			261 202	263 445	273 401	138 843	134 558	103	112 666	110 490	2.04
1949			266 518	270 327	281 343	143 433	137 910	104	117 614	113 232	2.91

<sup>(</sup>a) Full-blood aboriginals excluded from census data prior to 1966.
(b) As recorded. Not adjusted for under-enumeration. (c) Includes Catholic and Roman Catholic.
(d) The Uniting Church was formed in 1978 from members of the Congregational, Methodist and Presbyterian churches.
(e) Conjugal condition was allocated prior to tabulation in all instances where this information was not stated.

<sup>(</sup>Chapter 5)

## APPENDIX B

(Chapter 5)

### Population, Arrivals and Departures, Tasmania-continued

				Estim	ated popula	tion (a)					Annual
	Year	Total	Mean:	Mean:		Totals at	I December	,			rate of
		at 30 June	year ended 30 June	year ended 31 Dec.	Persons	Males	Females	Mascu- linity (b)	Arrivals (c)	Depart- ures (c)	increase of popula- tion (d)
		no.	no.	no.	no.	no.	no.		no.	no.	per cent
1950	*******************************	. 275 902	274 493	278 785	290 333	147 103	143 230	103	127 709	122 333	3.20
1951		. 286 193	283 526	288 294	301 787	153 721	148 066	104	137 341	129 514	3.95
1952		. 296 299	293 340	298 361	309 558	157 702	151 856	104	130 583	126 979	2.57
1953		304 080	302 529	306 318	316 465	161 305	155 160	104	127 484	125 812	2.23
	(e)	. 308 752	309 416	311 055	319 218	162 393	156 825	104	126 976	128 424	0.87
1955		. 314 092	312 694	315 565	324 919	165 356	159 563	104	137 834	137 144	1.79
1956		318 470	318 309	321 039	331 340	168 695	162 645	103	143 104	141 686	1.98
1957	***************************************	326 130	324 666	328 435	338 807	172 186	166 621	103	143 601	141 310	2.25
1958	***************************************	. 333 066	332 046	335 382	343 898	174 465	169 433	103	141 814	141 995	1.50
1959		. 339 376	338 628	341 423	351 349	178 109	173 240	103	162 761	160 569	2.17
960		. 343 910	344 111	346 913	355.969	180 511	175 458	103	182 537	183 513	1.31
1961	(e)	. 350 340	350 077	353 623	353 258	178 864	174 394	103	186 423	184 165	-0.76
1962		. 355 668	353 175	355 682	358 087	181 085	177 002	102	185 268	186 023	1.37
1963	***************************************		358 180	360 590	362 799	183 330	179 469	102	198 443	199 918	1.32
1964		. 364 311	362 758	364 554	366 508	185 051	181 457	102	219 930	223 380	1.02
1965			366 366	367 970	369 608	186 483	183 125	102	248 964	249 617	0.85
	(e)		369 600	371 483	373 309	188 180	185 129	102	257 463	256 068	1.00
1967			373 321	375 397	377 841	190 369	187 472	102	270 934	271 812	1.21
1968			377 582	379 916	383 055	192 871	190 184	101	276 798	276 856	1.38
1969		. 384 893	382 710	385 079	386 998	194 788	192 210	101	296 186	297 069	1.03
1970			386 665	388 180	390 253	196 363	193 890	101	320 867	323 449	0.84
	(e)		(g) n.a.	(g) n.a.	399 500	200 600	198 900	100	340 163	340 642	(g)n.a.
1972			399 400	400 500	401 900	201 600	200 300	100	356 561	355 224	0.60
1973	***************************************		401 800	403 200	404 600	202 800	201 800	100	450 707	448 556	0.67
1974			404 600	406 300	408 800	204 600	204 200	100	508 449	502 488	1.04
1975	***************************************		408 300	410 000	411 500	205 900	205 600	100	510 639	514 278	0.66
	(e)		411 300	412 400	413 700	206 900	206 800	100	509 356	507 384	0.53 0.68
1977 1978			413 700 416 500	415 100 417 800	416 500	208 300 209 600	208 300 209 600	100 100	538 665 557 275	530 535 559 293	0.68
1979	***************************************		419 200	420 700	419 100 422 200	210 700	211 600	100	576 050	574 790	0.74
1980		423 600	422 200	423 600	425 200	211 600	213 600	99	r 591 152	r 592 049	0.71
	(e)		425 300	427 100	428 200	212 900	215 300	99	r 591 699	r 593 780	0.70
1982			428 500	429 700	r 430 800	214 100	216 700	99	r 583 770	r 588 829	r 0.61
	p		430 900	432 600	434 700	215 900	218 700	99	563 666	563 554	0.91

<sup>(</sup>a) Prior to 1966 excludes Aboriginals.

(b) Number of males per 100 females.

(c) Series of recorded interstate arrivals and departures prepared by State Department of Tourism replaces ABS series from 1972. Includes movement to and from New Zealand from 1980.

(d) The rate of increase during the previous 12 months or, in the years prior to 1936, the average (compound) rate of increase during the previous five years.

(e) Census year.

(f) Excludes troop movements.

(g) Not available due to change in series.

(Chapter 5)

Births, Deaths, Marriages and Divorces, Tasmania

			Nui	mber		Rate	per 1 000 o <sub>s</sub> population		Deaths under one year of age	
	Year	Births	Deaths	Marriages	Divorces	Births	Deaths	Marriages	Number	Rate per 1 000 live births
1820		n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1830	***************************************	460	270	163	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1840		404	501	457	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1845	***************************************	1 506	697	658	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1850		2 025	1 070	923	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1855		2 948	1 692	1 257	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1860	***************************************	3 238	1 749	689	n.a.	36.48	19.71	7.76	n.a.	n.a.
1865		3 069	1 263	591	n.a.	32.96	13.56	6.35	n.a.	n.a.
1870	***************************************	3 054	1 404	670	n.a.	30.53	14.03	6.70	298	97.6
1875		3 105	2 079	689	n.a.	29.86	19.99	6.83	407	131.1
1880		3 739	1 832	840	n.a.	32.90	16.12	7.39	420	112.3
1885		4 637	2 036	1 054	n.a.	36.29	15.94	8.25	522	112.6
1890	***************************************	4 813	2 118	954	n.a.	33.60	14.79	6.66	508	105.6
1895	*******	4 790	1811	846	5	31.16	11.78	5.50	391	81.6
1900		4 864	1 903	1 332	4	28.18	11.02	7.72	389	80.0
1905		5 257	1 844	1 365	2	28.50	10.00	7.40	424	80.7
1910	***************************************	5 586	2 120	1 493	6	29.25	11.10	7.82	568	101.7
1915	***************************************	5 845	2 015	1 600	7	29.79	10.27	8.15	423	72.4
1920		5 740	2 036	1 999	18	27.29	9.68	9.50	376	65.5
1925		5 218	1 996	1 504	37	24.21	9.26	6.98	288	55.2

# STATISTICAL SUMMARY

(Chapter 5)

# Births, Deaths, Marriages and Divorces, Tasmania—continued

			Nui	nber		Rate	per 1 000 oj population			under one of age
	Year	Births	Deaths	Marriages	Divorces	Births	Deaths	Marriages	Number	Rate per 1 000 live births
1930		4 786	1 948	1.450	42	21.77	0.03	6.56	242	50.6
1931		4 762	2 057	1 450 1 501	42 47	21.66 21.18	8.82 9.15	6.68	219	45.9
1932		4 491	2 022	1 508	33	19.78	8.90	6.64	185	41.2
1933		4 553	2 192	1 629	42	19.93	9.60	7.13	187	41.1
1934	***************************************	4 470	2 345	1 678	60	19.50	10.23	7.32	189	42.3
1935	***************************************	4 456	2 353	1 875	87	19.39	10.24	8.16	231	51.8
1936	***************************************	4 581	2 387	2 073	62	19.79	10.31	8.96	227	49.6
1937	******	4 841	2 225	2 042	30	20.65	9.49	8.71	202	41.7
1938		4 907	2 288	2 082	109	20.76	9.68	8.81	195	39.7
1939	***************************************	5 004	2 426	2 264	80	20.95	10.16	9.48	203	40.6
1940		4 994	2 387	2 476	83	20.71	9.90	10.27	176	35.2
1941		5 206	2 575	2 150	84	21.66	10.71	8.94	255	49.0
1942		5 305	2 430	2 431	83	22.00	10.08	10.08	255	42.4
1943	***************************************	5 597	2 527	2 102	89	23.05	10.41	8.66	227	40.6
1944 1945	***************************************	5 200 5 785	2 494 2 413	1 935	115	21.17	10.15 9.71	7.88 7.51	199 159	38.3 27.5
1945		6 847	2 549	1 868 2 650	172 219	23.27 27.15	10.11	10.51	207	30.2
1947	***************************************	7 140	2 363	2 584	210	27.13	9.17	10.03	195	27.3
1948	***************************************	6 979	2 528	2 428	185	26.49	9.60	9.22	193	27.7
1949		7 110	2 389	2 422	266	26.30	8.84	8.96	170	23.9
1950		7 242	2 466	2 560	152	25,96	8.85	9.18	172	23.8
1951		7 357	2 567	2 607	194	25.52	8.93	9.04	196	26.6
1952		7 916	2 579	2 553	217	26.53	8.64	8.56	172	21.7
1953	***************************************	7 736	2 551	2 424	210	25.25	8.33	7.91	177	22.9
1954		7 770	2 696	2 512	238	24.98	8.67	8.08	186	23.9
1955	***************************************	8 089	2 489	2 600	233	25.63	7.89	8.24	189	23.4
1956		8 104	2 513	2 601	197	25.24	7.83	8.10	170	21.0
1957 1958		8 435 8 568	2 670 2 708	2 507	180	25.68	8.13	7.63 7.38	170 167	20.2 19.5
1959		8 625	2 780	2 475 2 567	176 222	25.55 25.26	8.07 8.14	7.52	202	23.4
1960		8 853	2 670	2 713	210	25.52	7.70	7.82	169	19.1
1961		8 892	2 789	2 677	286	25.40	7.89	7.57	151	16.8
1962		8 894	2 870	2 485	249	25.01	8.07	6.99	184	20.7
1963		8 530	2 818	2 579	261	23.66	7.82	7.15	153	17.9
1964	***************************************	8 252	3 174	2 869	230	22.64	8.71	7.87	166	20.1
1965		7 535	3 043	2 888	280	20.48	8.27	7.85	125	16.6
1966		7 401	3 159	2 946	319	19.92	8.50	7.93	108	14.6
1967		7 547	3 228	3 213	248	20.10	8.60	8.56	130	17.2
1968	***************************************	8 317	3 284	3 426	303	21.89	8.64	9.02	143	17.2
1969		8 445	3 309	3 532	331	21.93	8.59	9.17	139	16.5
1970		8 185	3 174	3 535	426	21.09	8.16	9.11	116	14.2
1971		8 321	3 295	3 578	432	21.32	8.44	9.17	114	13.7
1972 1973		7 824	3 227	3 426	446	19.94	8.22	8.73	127	16.2 18.7
1973	***************************************	7 326 7 398	3 347 3 484	3 395 3 567	444 536	18.51 18.52	8.46 8.72	8.58 8.93	137 123	16.6
1974		6 982	3 484 3 339	3 242	536 591	18.52	8.72	8.93	123	18.3
1976		6 702	3 389	3 477	1 761	16.44	8.32	8.53	77	11.5
1977		6 735	3 269	3 166	1 134	16.40	7.96	7.71	99	14.7
1978	***************************************	6 788	3 271	3 148	1 132	16.41	8.00	7.61	97	14.3
1979		6 757	3 167	3 245	1 167	16.17	7.58	7.79	95	14.1
1980		6 735	3 392	3 433	1 285	15.90	7.80	8.20	79	11.7
1981	***************************************	7 188	3 320	3 515	1 139	16.83	7.77	8.23	86	12.0
1982		7 002	3 432	3 576	1 391	16.36	7.99	8.32	55	7.9
1983		7 028	3 311	3 644	1 359	p16.25	p7.65	p8.42	74	10.5

(Chapter 6)

Education: Post Secondary and Tertiary, Tasmania.

				ge of Education	<u>.</u>	University				
	Year	Teaching staff		Students		Teaching staff		Students		
		full-time	full-time	part-	time	full-time	full-time	part	-time	
1900					**	9	<u> </u>	51		
1905		**				9		67		
1910						10		147		
1915					••	17		258		
1920			**		**	23		179		
1925					**	28		173		
1930			**		**	29		449		
1935						36		229		
1940		**				47		452		
1945						43		503		
1950						64		673		
1955						78		800		
1960						108		1 395		
1961						110		1 515		
1962						120		1 572		
1963		n.a.	n.a.		n.a.	127		1 691		
1964		n.a.	n.a.		n.a.	131		1 954		
1965		n.a.	n.a.		n.a.	145		2 300		
1966		n.a.	n.a.		n.a.	163		2 377		
1967		n.a.	n.a.		n.a.	164	1 661	23	822	
1968		52		1 052		169	1 809		835	
1969		52	218	1 032	903	193	1 958		900	
1970	***************************************	53	238		896	202	2 260		864	
1971		62	316		826	220	2 409		1 035	
1972		115	1 204		607	248	2 326		1 045	
1973		165	1 420		583	254	2 230		1 033	
1974		184	1 621		640	271	2 291		1 123	
1975		203	1 748		687	280	2 314		1 085	
1976		206	1 824		818	293	2 468		1 068	
1977		201	1 836		750	298	2 685		840	
1978		210	1 855		941	309	2 514		1 003	
1979		204	1 893		934	301	2 377		1 058	
1980		196	1 806		1 120	301	2 344		1 173	
1981		123	957		1 125	373	3 189		1 893	
1982		r129	929		1 251	372	3 078		2 132	
1983		141	1 042		1 492	359	3 101		2 128	
1984		146	1 124		1 575	359	3 243		2 145	

(Chapter 6)

Education: Primary and Secondary, Tasmania

		Government school	s	No	n-government scho	ools
Year	Number of schools	Teaching staff	Students (a)	Number of schools	Teaching staff	Students (b)
1900	309	(c) 612	24 157	224	n.a.	9 749
1905	343	600	24 043	167	n.a.	8 323
1910	367	677	30 805	124	420	6 278
1915	457	968	35 812	92	322	5 944
1920	470	1 102	39 360	84	317	5 872
1925	515	1 315	39 910	75	312	6 103
1930	508	1 358	40 032	66	326	5 862
1935	516	1 282	39 332	65	324	5 794
1940	431	1 398	37 369	63	329	6 139
1945	356	1 511	35 925	59	321	6 987
1950	332	1 687	46 394	58	375	8 330
1955	291	2 277	60 779	57	424	10 454
1960	287	2 540	65 049	60	544	12 716
1961	289	2 479	66 624	66	570	13 435
1962	286	(d) 2 771	68 346	66	597	13 673
1963	288	2 955	69 633	66	595	14 194
1964	293	3 075	70 643	64	635	14 385
1965	296	3 243	71 615	64	666	14 688
1966	294	3 374	72.461	64	686	14 743
1967	297	3 531	74 265	65	695	14 913
1968	291	3 571	76 109	68	753	14 974
1969	295	3 666	78 339	67	760	14 740

## Education: Primary and Secondary, Tasmania-continued

		overnment school	's	Noi	n-government scho	ools
Year	Number of schools	Teaching staff	Students (a)	Number of schools	Teaching staff	Students (b)
970	283	3 756	20.395	<b>C</b> D	010	
971	283	3 796	79 385	68	810	14 623
972	280	3 845	80 092	68	775	14 415
973 (e)	280	3 937	79 957	66	791	14 098
974 (e) (f)	245		79 705	65	684	14 237
		4 061	73 848	56	693	13 812
. ,.,	247	4 247	74 332	58	717	13 838
76 (e)	250	4 241	74 533	61	720	13 825
077 (e) (g)	250	4 360	74 235	62	729	13 938
978 (e)	253	4 584	73 676	61	757	14 251
979 (e)	252	4 752	73 016	60	792	14 401
980	r 256	4 908	72 283	59	831	14 620
981	r 258	4 948	70 486	61	854	14 917
82	259	4 901	69 142	70	904	15 326
83	257	5 025	68 387	70	976	15 940
084	257	5 145	67 787	71	1 030	16 464

- (a) Aggregate enrolment for whole year prior to 1960. From 1960 as at 1 August and excluding adult correspondence students.
  (b) Aggregate enrolment for whole year to 1919. From 1920 to 1961 enrolment as at 31 December and thereafter at 1 August.
  (c) Includes teachers, pupil-teachers and paid monitors; excludes training college staff, junior monitors, subsidised teachers, etc.
  (d) Includes part-time teachers but excludes teachers at special schools from 1962.
  (e) Full-time plus full-time equivalent of part-time teachers.
  (f) From 1974 figures exclude kindergartens.

- (g) From 1977 Government school figures are shown using National Schools Collection definitions.

(Chapter 7)

# Commonwealth Social Service Benefits Paid in Tasmania

		Family	Maternity	allowance		oloyment nefit	Sickness benefit		Special benefit (b)	
	⁄ear	allowances, total amount paid (a)	Claims admitted	Amount paid	Claims admitted	Amount paid	Claims admitted	Amount paid	Claims admitted	Amount paid
		\$.000	no.	\$.000	no.	\$'000	no.	\$.000	no.	\$'000
1912-13	***************************************	-	3 611	n.a.		_		_	_	_
1944-45	***************************************	1 057	5 582	n.a.		_	_	_		
1949-50		2 483	7 408	n.a.	151	4	2 840	74	126	8
1954-55		(c) 4 065	7 940	255	471	(d) 32	1 943	(d) 103	106	24
1959-60	•••••	4 719	8 985	285	3 186	242	1 883	135	130	39
1960-61		5 484	9 007	296	3 995	229	1 893	134	102	39
1961-62		4 993	8 942	289	8 273	696	2 000	163	93	38
1962-63		5 045	8 560	277	7 141	783	2 099	203	111	44
1963-64		6 1 1 3	8 437	272	6 720	750	2 167	215	135	52
1964-65		6 306	7 821	251	5 255	583	2 238	201	122	52
1965-66		6 318	7 578	243	2 742	275	2 040	174	122	57
1966-67		6 912	7 606	243	3 166	228	2 147	190	160	47
1967-68		6 612	7 939	254	3 746	264	1 952	165	99	42
1968-69		6 710	8 373	267	3 984	297	2 070	166	403	55
1969-70		7 416	8 130	259	3 825	360	2 194	199	429	68
1970-71		6 686	8 594	274	4 388	366	2 687	327	388	. 71
1971-72		7 196	8 211	260	8 974	966	2 964	497	418	79
972-73		8 185	7 615	241	12 536	2 095	3 295	792	459	128
973-74		7 212	7 296	230	11 642	3 125	3 975	1 247	574	224
974-75		6 610	7 225	229	22 088	7 746	4 144	1 692	800	443
975-76		7 766	7 210	215	30 930	15 256	5 018	2 409	1 760	811
976-77		31 197	6 729	215	23 981	17 963	4 662	2 380	1 827	979
977-78		30 968	6 836	213	27 337	23 398	4 284	2 385	1 792	804
978-79		28 924	n.a.	91	26 294	28 609	3 881	2 024	2 071	1 299
979-80		30 549	_	-	26 316	29 665	3 554	2 299	2 051	1 487
980-81		27 765	_	_	28 234	34 658	3 626	2 901	3 463	2 372
981-82		122 793		_	32 147	49 233	3 707	3 595	3 999	2 956
982-83	***************************************	39 146	_		31 686	78 302	3 750	4 618	3 652	3 428
983-84		42 820	Marin.	_	27 308	90 126	3 555	5 221	3 858	3 714

 <sup>(</sup>a) Known as 'child endowment' up to 1975-76; replaced by increased 'family allowances' from 1 July 1976 in conjunction with abolition of tax rebates in respect of dependent children.
 (b) Includes payments to migrants.
 (c) Endowment extended to first child from 20 June 1950.
 (d) Rates payable were doubled from 22 September 1952.
 (e) Maternity allowance ceased 1 November 1978.

(Chapter 7)

Commonwealth Pensions: Tasmania

			Age and in	valid pensio	ns		War pen	sions (a)	Widows	pensions
Year		ber of ioners		liture on sions	Weekly rate	Operative	Number in	Amount	Number in	Amount
	Age	Invalid	Age	Invalid	(b)	from	force	paid	force	paid
	no.	no.	\$'000	\$'000	\$	date	no.	\$'000	no.	\$'000
909-10	3 245	_	159	_	1.00	1.7.1909	_	_	-	_
914-15	4 528	1 349	223	68	1.00				_	-
919-20	4 806	1 947	364	145	1.50	13.9.1923	9 551	524	-	_
924-25	5 856	2 036	503	180	1.75	8.10.1925	10 770	590		_
929-30		2 456	753	248	2.00	23.7.1931	12 321 12 523	695 724	_	_
934-35		2 975 2 552	737 1 055	263 256	1.75 2.10	26.12.1940 19.8.1943	11 729	808		_
939-40		2 699	1 271	368	2.70	21.10.1948	12 081	1 103	1 564	207
949-50		3 158	2 359	670	4.25	2.11.1950	19 168	2 036	1 384	314
1950-51		2 885	2 819	724	5.00	1.11.1951	21 407	2 595	1 366	323
951-52		2 762	3 457	831	6.00	2.10.1952	22 863	3 121	1 358	376
952-53		2 602	4 107	879	6.75	29.10.1953	23 966	3 429	1 380	441
953-54		2 605	4 358	908	7.00	27 10 1055	24 935 25 731	3 641 3 934	1 371 1 409	461 475
954-55 955-56		2 681 2 596	4 795 5 605	967 1 063	7.00 8.00	27.10.1955	26 483	4 035	1 419	537
956-57		2 812	5 887	1 183	8.00	24.10.1957	26 751	4 054	1 476	607
957-58		2 883	6 527	1 315	8.75	24.10.1337	27 238	4 424	1 581	677
958-59		3 070	6 660	1 419	8.75	8.10.1959	27 621	4 458	1 663	741
1959-60		3 206	7 471	1 605	9.50		28 048	4 832	1 773	833
960-61		3 338	(c) 10 1		10.00	6.10.1960	28 305	5 166	1 849	940
961-62		3 299	11 4		10.50	5.10.1961	28 398	4 988	1 912 1 977	1 037 1 084
962-63		3 343	11 7		10.50	14.11.1963	28 214 27 913	5 668 6 158	2 109	1 467
963-64 964-65		3 363 3 532	12 3 13 1		11.50 12.00	1.10.1964	27 109	6 214	2 248	1 699
964-65		3 444	13 4		12.00	1.10.1704	26 446	6919	2 327	1 791
1966-67		3 530	14 5		13.00	13.10.1966	25 629	6 645	2 432	1 988
967-68		3 548	15 4		13.00	13.10.1700	25 015	6 790	2 588	2 125
968-69		3 819	16 7		14.00	10.10.1968	24 485	7 622	2 678	2 465
1969-70		4 051	19 5		15.00	9.10.1969	23 807	7 835	2 958	2 927
1970-71	24 894	4 316	21 8	335	15.50	8.10.1970	23 254	8.230	3 138	3 327
1971-72	25 668	4 498	25 5	543	16.00 17.25	8.4.1971 7.10.1971		9 094	3 205	3 842
1972-73	29 107	4 855	33 6	556	18.25 20.00	4.5.1972 Aug. 1972	22 512	9 857	3 600	5 136
1973-74	31 904	5 087	43 (	32	21.50 23.00	Mar. 1973 Aug. 1973	21 905	11 176	3 932	6 582
1974-75	34 269	5 460	60 1	18	26.00 31.00	Apr. 1974 Aug. 1974	21 987	13 697	4 103	8 521
1975-76	35 594	6 091	77 9	76	36.00 38.75	Apr. 1975 Aug. 1975	21 474	14 827	4 209	11 221
1976-77	36 954	6 612	91 7	788	41.25 43.50	Apr. 1976 Aug. 1976	20 778	16 637	4 572	12 455
1977-78	38 204	6 205	107 2	203	47.10 49.30	Apr. 1977   Nov. 1977	20 062	18 676	5 001	14 660
1079 70	20 000	6 427	117	70	51.45	May 1978 }	18 844	18 696	5 229	16 621
1978-79 1979-80		6 427 6 376	117 <del>(</del> 127 3		53.20 57.90	Nov. 1978 Nov. 1979	18 127 17 502	19 389	5 358	18 884
1980-81	40 000	6 487	142 5	519	61.05	May 1980	16 944	21 918	5 230	21 003
1981-82	40 413	6 615	163	130	74.15	May 1982	16 681	22 965	5 153	23 160
1982-83		6 767	176 (		85.90	Nov. 1982	16 305	28 887	5 144	24 187
1983-84	39 970	7 266	194 5	587	91.90	Nov. 1984	16 783	33 968	5 009	25 885

<sup>(</sup>a) Excludes pensions in respect of the Boer War which are paid by the United Kingdom.
(b) Maximum single rate payable; subject to Means Test.
(c) Separate figures for age and invalid pensions not available from 1960-61.

# STATISTICAL SUMMARY

(Chapter 9)

## Consumer Price Index Numbers, Hobart (a)

				Household			Health		All	groups
Year	Food	Clothing	Housing	equipment and operation	Transport- ation	Tobacco and alcohol	and personal care	Recreation and education	Index no.	Increase per cent (b)
1949-50	13.2	17.6	12.1 ]						[14.8	6.5
1954-55	23.9	26.5	18.4						24.0	
1955-56	25.4	26.8	20.2						25.2	5.0
1956-57	26.5	27.6	22.1						26.7	6.0
1957-58	25.7	28.3	22.8						26.7	
1958-59	26.1	28.6	23.4						27.1	1.5
1959-60	26.5	28.8	24.6	n.a.	n.a.	n.a.	n.a.	n.a.	27.6	1.8
1960-61	29.5	29.2	26.0						29.1	5.4
1961-62	28.8	29.6	27.1						29.3	0.7
1962-63	28.4	29.8	28.0						29.3	
1963-64	28.4	29.9	28.8						29.6	1.0
1964-65	30.0	30.3	30.0						30.5	3.0
1965-66	31.6	30.7	30.8						31.6	3.6
1966-67	32.0	31.3	31.7	34.9	31.1	32.2			32.3	2.2
1967-68	34.1	32.0	32.9	36.2	32.4	32.9	n.a.		33.7	4.3
1968-69	33.6	32.7	34.4	37.0	33.6	33.8			34.2	1.5
1969-70	34.0	33.8	35.7	37.5	34.6	34.5	29.1		35.0	2.3
1970-71	35.0	35.0	37.2	38.7	36.1	37.2	29.3		36.3	3.7
1971-72	36.1	37.1	39.4	41.7	39.4	40.1	34.0		38.7	6.6
1972-73	38.3	39.3	41.8	43.2	41.1	43.4	35.7		40.9	5.7
1973-74	45.2	44.5	46.6	46.4	43.4	49.2	40.0		46.0	12.5
1974-75	50.7	53.7	57.4	54.6	51.4	54.5	49.4	n.a.	53.8	17.0
1975-76	56.7	62.8	68.6	64.2	61.2	66.4	39.3		61.3	13.9
1976-77	64.4	72.7	77.7	70.5	68.6	71.5	71.0		70.2	14.5
1977-78	71.2	80.4	83.9	76.8	75.1	74.7	85.8		77.1	9.8
1978-79	80.3	86.7	88.2	82.4	79.7	86.4	82.9		83.1	7.8
1979-80	91.6	93.1	93.1	89.8	90.6	93.1	90.7		91.6	10.2
1980-81	100.0	100.0	100.0	100.0	100.0	100.0	100.0		100.0	9.2
1981-82	: : : : :	106.4	107.4	110.0	112.8	109.1	120.5		110.0	10.0
	118.6	112.8	116.3	121.7	126.8	124.0	143.0	109.4	121.8	10.7
	128.2	119.5	123.9	132.8	136.7	137.8	131.5	117.3	129.9	6.7
1705-04	120.2	117.3	123.7	132.0	130.7	137.0	1.1.2	117.3	127.7	0.7

<sup>(</sup>a) Base of each index is year 1980-81 = 100.0 except 'Recreation and education' which is March quarter 1981-82. (b) Over previous year.

(Chapter 9)

### Employment; Unemployment; Wage Rates and Earnings, Tasmania

		Unemp	loyment	Prescribed w rates, adui Hobart at 31	t males,	wee earn	rage ekly ings,
Year	Employed persons, labour force	Labour force	Persons receiving unemploy-	Basic	Minimum	all male employees for June qtr	
	survey (a)	survey (a)	ment benefits (b)	wage (c)	wage (d)	Amount (e)	Increase (f)
	('000')	('000)	no.	\$	\$	\$	per cent
39	)		ſ	7.70		n.a.	n.a.
940				8.10	••	n.a.	n.a.
41				8.50		n.a.	n.a.
42			·	9.20	**	9.60	n.a.
43				9.50		10.40	8.3
44				9.40		10.60	1.9
45				9.40		10.50	-1.0
46			83	10.30	**	10.80	2.9
47			44	10.70		12.00	11.1
48			28	11.80		14.00	16.7
49	n.a.	n.a.	32	12.80		15.60	11.4
50			32	16.00	**	18.00	15.4
51			10	19.90		22.10	22.8
52	!		104	23.00		27.10	22.6
53			323	24.20		28.80	6.3
154			109	24.20		30.60	6.3
55			52	24.20		33.60	9.8
56			71	25.20		35.30	5.1
57	1		410	26.20		36.60	3.7
58			639	26.70		37.50	2.5
59			.670	28.20		37.60	0.3
60	1		522	28.20		41.50	10.4

(Chapter 9)

Employment; Unemployment; Wage Rates and Earnings, Tasmania-continued

		Unemp	loyment	Prescribed w rates, adu Hobart at 3	ılt males,	Average weekly earnings,	
Year	Employed persons, labour	Labour	Persons receiving unemploy-		- December	all emplo	male
	force survey (a)	force survey (a)	ment benefits (b)	Basic wage (c)	Minimum wage (d)	Amount (e)	Increase (f)
	(*000)	('000)	no.	\$	\$	\$	per cent
1961	· )		(1416	29.40		41.70	0.5
1962			1 778	29.40		44.60	7.0
1963	T .	n.a.	<b>∤</b> 1 777	29.40	**	45.10	1.1
1964			1 399	31.40		46.50	3.1
1965			946	31.40		49.20	5.8
1966		2.8	457	33.40		51.50	4.7
1967		3.0	546	34.40	38.15	55.80	8.3
1968		2.2	635	35.75	40.45	58.50	4.8
1969		3.3	600	36.80	43.00	63.10	7.9
1970	. 155.9	3.3	437	36.80	43.00	68.40	8.4
1971		2.9	873	39.00	47.00	76.70	12.1
1972		3.8	1 697	41.00	51.70	83.20	8.5
1973		3.0	2 330	43.50	60.70	93.60	12.5
1974		3.9	1 769	46.00	68.70	109.60	17.1
1975		7.4	4 439	50.00	83.50	138.50	26.4
1976		8.1	7 228	62.90	102.30	155.10	12.0
1977		9.9	7 078	72.40	114.00	175.10	12.9
1978		11.0	9 757	77.50	121.90	190.10	8.6
1979		7.9	10 420	(g) 80.00	(g) 125.80	204.20	7.4
1980	171.7	9.8	11 121	87.10	137.00	234.70	14.9
1981		11.4	12 929	93.60	147.20	261.60	11.5
1982		16.5	16 263	93.60	168.00	312.00	19.3
1983		19.0	20 355	97.60	175.20	337.10	8.0
1984	169.0	19.7	19 150	101.60	182.40	371.40	10.2

(Chapter 10)

#### Average Retail Prices (a) of Selected Items of Foodstuffs: Hobart (Cents)

Year	Bread (b)	Tea	Sugar	Pota- toes	Butter (fact- ory)	Eggs 1 doz	Bacon rashers	Beef rib without bone	Corned beef (bris- ket) (c)	Mutton (leg) (c)	Mutton chops (loin) (c)	Pork (leg)
	680 g	250 g	2 kg	l kg	500 g	55 g	250 g	l kg	l kg	l kg	l kg	l kg
1901	2.3	6.8	9.3	1.4	12.5	10.6	9.3	11.2	9.3	9.0	10.4	11.7
1906	2.4	6.8	9.3	2.2	11.6	12.9	7.9	11.7	9.3	9.7	10.6	11.2
1911	2.6	6.8	9.7	4.7	12.1	12.1	11.9	11.7	9.3	8.6	10.6	11.2
1916	3.2	7.9	12.8	2.1	17.5	14.4	15.5	41.4	16.8	18.1	19.4	21.4
1921	5.4	9.6	22.0	1.9	23.7	18.8	19.4	22.0	18.1	17.6	20.1	28.7
1926	4.6	12.0	16.3	3.7	21.2	16.2	16.4	20.3	15.7	17.6	20.7	24.0
1931	3.4	12.8	16.8	1.9	17.1	12.0	13.0	16.5	13.0	10.8	14.8	17.9
936	3.7	12.6	17.9	2.4	15.0	14.9	11.1	15.0	14.6	15.4	16.8	18.1
1941	4.6	16.8	17.9	2.4	18.4	15.9	16.0	19.8	16.5	15.9	17.2	23.1
1946	4.6	12.5	17.9	2.2	19.3	20.5	19.3	24.7	20.1	21.2	21.2	26.0
1951	7.8	21.3	21.2	7.6	27.9	40.8	21.8	42.3	38.1	42.1	40.1	67.2
1956	12.4	40.3	36.6	20.5	51.0	54.1	34.6	73.4	55.6	55.6	43.9	106.3
961	14.5	38.3	42.3	20.2	52.4	57.1	39.5	98.3	85.8	56.2	45.9	119.5
962	14.9	37.1	42.3	12.7	52.6	56.1	38.5	89.7	74.5	51.8	39.7	113.1
963	15.2	36.5	42.3	9.3	53.2	57.6	39.5	95.2	76.9	54.7	41.0	123.5
964	15.3	36.3	42.1	14.8	53.9	56.1	42.8	98.8	79.6	58.6	47.6	130.1
965	15.7	36.3	41.8	20.5	54.7	60.2	49.6	111.3	87.3	65.7	55.8	136.5

<sup>(</sup>a) At August each year to 1977, at June each year from 1978.
(b) Persons on benefit on last Saturday of June. Unemployment Benefit was first paid in July, 1945. (Source: Department of Social Security.)
(c) The rates shown up to and including 1966 are those in Commonwealth awards. State Wages Boards awards are shown from 1967. The Commonwealth and State rates prior to 1967 were identical except between 1956 and 1959 when the State's rates were slightly higher.
(d) The Tasmanian Wages Boards introduced the concept of the minimum wage in June 1967.
(e) Based on the survey of average weekly earnings introduced in September quarter 1981. Amounts for June 1981 and earlier periods are estimated by linking the various pay-roll tax series with the new series at September quarter 1981.
(d) Over June quarter of previous year.

<sup>(</sup>f) Over June quarter of previous year.
(g) Tasmanian decision of 13 July 1979 following National Wage Case decision of 27 June 1979.

## STATISTICAL SUMMARY

(Chapter 10)

# Average Retail Prices (a) of Selected Items of Foodstuffs: Hobart (Cents)—continued

Year	Bread (b)	Tea	Sugar	Pota- toes	Butter (fact- ory)	Eggs I doz	Bacon rashers	Beef rib without bone	Corned beef (bris- ket) (c)	Mutton (leg) (c)	Mutton chops (loin) (c)	Pork (leg)
	680 g	250 g	2 kg	1 kg	500 g	55 g	250 g	l kg	l kg	1 kg	l kg	l kg
1966	17.0	36.5	41.8	11.3	56.7	63.0	52.7	119.0	94.6	69.2	57.5	140.2
1967	18.0	36.6	46.0	15.5	57.3	65.7	54.9	125.9	100.5	71.4	62.2	145.1
1968	19.1	36.4	49.0	15.2	57.3	62.2	56.3	122.1	138.9	108.5	111.8	149.5
1969	20.1	35.2	49.2	13.4	59.7	68.3	54.6	116.0	135.8	106.3	108.0	147.5
1970	21.3	33.9	49.0	14.1	60.6	67.7	55.6	122.6	138.9	197.6	109.3	147.5
1971 1972 1973 1974 1975 1977 1977	23.5 24.9 27.0 31.2 39.2 45.1 48.8 52.0	35.3 36.7 35.6 37.2 49.7 53.0 92.3 88.5	48.0 48.4 47.9 48.0 52.4 56.7 63.5 68.8	14.5 16.3 20.5 30.4 19.6 33.7 26.6 35.8	62.0 63.9 63.9 67.5 77.0 85.2 91.5 91.3	64.4 67.4 75.2 58.8 93.7 109.2 123.4 128.5	55.2 56.9 57.6 75.6 91.9 111.6 123.0 126.5	127.4 127.2 145.3 153.9 136.7 163.1 181.4 202.3	144.4 149.9 175.0 201.3 180.8 201.1 218.7 247.5	107.4 113.3 148.8 170.9 171.5 197.1 238.9 269.8	107.6 114.0 149.3 174.8 173.1 198.2 240.0 277.8	148.8 151.9 171.3 220.0 256.6 302.7 326.1 344.5
1979	57.0	79.5	85.3	39.5	94.8	138.5	149.5	333.8	379.5	332.8	349.3	415.3
1980	63.8	77.3	95.3	45.0	104.8	147.5	170.5	392.0	441.8	357.5	371.0	464.0
1981	72.0	79.5	102.0	51.5	119.0	161.3	182.5	404.3	447.5	357.5	378.8	490.3
1982	79.5	86.5	115.8	45.3	150.8	169.3	204.8	409.0	441.8	359.5	373.8	540.0
1983	84.3	103.3	128.5	59.8	168.0	178.0	218.0	471.8	499.5	375.5	413.8	536.3
1984	92.0	140.3	134.0	52.8	171.0	184.8	225.8	498.8	528.5	401.3	440.0	550.8

 <sup>(</sup>a) In almost all cases the table units are not necessarily those for which the original price data were obtained. In such cases, prices have been calculated for the table unit.
 (b) Prior to 1978, bread delivered, 900 g. (c) From 1968 prices shown are for 'Silverside, lamb (leg), lamb chops (loin)', respectively.

(Chapter	11)
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### **Building Approvals, Tasmania**

	New	houses	Other nev	Other new dwellings		w dwellings	Alterations and additions	Other building	Total all building
Year	No.	Value	No.	Value	No.	Value	to dwellings Value (a)	\$'000 22 099 14 454 20 851 20 060 14 790 23 250 28 432 26 340 39 414 23 494 27 358 37 337 34 879 44 574 39 353 50 433 56 441 86 186 77 119 91 442 73 190 90 371	Value
		\$'000		\$.000		\$'000	\$'000	\$'000	\$,000
1959-60	2 546	16 134	187	926	2 733	17 060		22 099	39 159
1960-61	2 273	15 190	152	895	2 425	16 085			30 539
1961-62	2 527	16 486	119	467	2 646	16 953			37 804
1962-63	2 471	16 542	173	814	2 644	17 356			37 416
1963-64	2 648	18 845	165	886	2 813	19 731			34 521
1964-65	2 669	20 209	252	1 413	2 921	21 622			44 872
965-66	2 428	19 083	218	1 355	2 646	20 438			48 870
966-67	3 218	25 777	227	1 476	3 445	27 253			53 593
1967-68	3 309	30 083	425	2 522	3 734	32 605	n.a.		72 019
1968-69	2 694	25 893	438	2 904	3 132	28 797			52 291
1969-70	2 656	26 631	781	5 545	3 437	32 176		27 358	59 534
1970-71	2 581	26 618	610	4 036	3 191	30 654			67 991
1971-72	2 484	28 430	909	6 773	3 393	35 203			70 083
1972-73	3058	39 454	768	6 393	3 826	45 847		44 574	90 421
1973-74	3 282	51 798	893	8 771	4 175	60 569	797	39 353	100 719
974-75	2 627	51 460	732	9 678	3 359	61 138	1 163	50 433	112 736
975-76	3 380	82 908	1 056	18 715	4 436	101 623	2 326	56 441	160 390
976-77	3 314	89 367	1 088	21 159	4 402	110 526	3 877	86 160	200 562
977-78	2 778	78 138	911	17 959	3 689	96 097	4 8 1 7	86 816	187 729
978-79	2 834	83 429	810	17 779	3 644	101 208	5 089	77 119	183 416
1979-80	2 511	81 479	804	17 165	3 315	98 644	5 828	91 442	195 912
1980-81	2 327	81 713	873	19 992	3 200	101 705	6 950		181 845
1981-82	1 989	72 285	741	18 051	2 730	90 336	7 786		188 493
1982-83	2 057	76 438	670	17 111	2 727	93 549	7 653	62 242	163 444
1983-84	2 918	117 045	769	22 215	3 687	139 260	10 268	80 150	229 678

(a) Prior to 1973-74, alterations and additions valued at \$10 000 or more to dwellings were included with the number and value of dwellings.

(Chapter 11)

## Summary of Dwellings at Census Dates, Tasmania

Particulars				Date	of Cens	us			
	April 1921	June 1933	June 1947	June 1954	June 1961	June 1966	June 1971	June 1976	June 1981
Dwellings (including hotels, boarding houses, flats, etc.)—									
Occupiedno.	45 818	52 484	62 484	78 789	91 528	99 366	110 483	122 573	136 269
Unoccupiedno.	2 934	2 421	2 351	5 288	8 582	10 800	13 302	15 786	17 765
Totalno.	48 752	54 905	64 835	84 077	99 840	110 166		138 359	154 034
Average inmates per occupied dwellingno.	4.67	4.34	4.11	3.92	3.84	3.74	3.53	3.29	3.07
Occupied private dwellings according to-									
Class of dwelling—									
Private house (including share) (a)no.	42 028	48 479	58 937	74 244	83 736	90 131	99 401	100 534	119 573
Flat (including apartment)no.]	2 404	2 831	2 604	2 534 869	5 574	7 058	8 417	21 298	16 025
Otherno.	2 404	2 831	461	869	888	1 093	1 785	21 298	10 023
Totalno.	44 432	51 310	61 462	77 647	90 198	98 282	109 603	121 832	135 598
Nature of occupancy—									
Ownerno.	16 851	20 404	28 377	38 436	42 896	67 855	73 267	38 852	44 740
Purchaser by instalmentsno.	4 364	3 986	4 140	9 8 1 0	19 006	0/633	13 201	44 432	44 977
Tenantno.	19 037	22 734	26 077	26 991	25 938	25 597	30 583	29 638	33 909
Other methods of occupancy									
(including not stated)no.	4 180	4 186	2 868	2 4 1 0	2 358	5 000	5 753	8 910	11 972

<sup>(</sup>a) Separate house for 1976.

(Chapter 11)

Value of Building: Commenced, Completed and Under Construction, Tasmania (\$'000)

						Buildi	ng construc	tion			
	Year	Building approvals	C	ommenced		C	Completed		Under cons	truction at	30 June
			New dwellings	Other building	Total all building	New dwellings	Other building	Total all building	New dwellings	Other building	Total all building
1946-47		6 726	3 728	1 708	5 436	2 308	526	2 834	3 614	1 904	5 518
1947-48		8 358	5 256	1 958	7 214	3 492	1 066	4 558	5 532	2 760	8 292
1948-49		11 742	7 960	2 782	10 742	6 042	1 578	7 620	7 670	4 074	11 744
1949-50		16 740	11 702	5 056	16 758	8 426	2 258	10 684	11 368	6 612	17 980
1950-51		21 694	15 000	5 672	20 672	13 508	3 298	16 806	14 250	10 106	24 356
	***************************************	20 042	15 360	6 766	22 126	16 414	4 608	21 022	14 504	13 036	27 540
1952-53		15 984	10 664	2 558	13 222	15 252	6 078	21 330	10 608	10 380	20 988
1953-54		21 646	13 552	4 896	18 448	13 520	5 864	19 384	11 532	12 032	23 564
1954-55		25 612	15 244	6 428	21 672	13 092	8 206	21 298	13 992	10 806	24 798
1955-56		25 074	13 842	5 936	19 778	15 138	10 458	25 596	13 230	6 498	19 728
1956-57		30 964	15 138	13 138	28 276	16 434	8 784	25 218	12 420	11 750	24 170
		27 232	14 980	10 486	25 466	15 844	9 836	25 680	11 866	12 026	23 892
		27 592	16 662	12 156	28 818	15 986	10 914	26 900	12 742	13 364	26 106
1959-60		39 159	15 834	20 652	36 486	16 570	15 036	31 606	12 026	19 156	31 182
		30 539	15 936	12 344	28 280	17 206	16 822	34 028	10 912	15 016	25 928
1961-62		37 804	17 026	18 360	35 386	16 630	16 824	33 454	11 136	16 640	27 776
1962-63		37 416	16 668	17 944	. 34 612	16 892	17 240	34 128	10 912	17 500	28 412
1963-74		34 521	18 944	15 720	34 664	18 070	15 906	33 976	11 764	17 330	29 094
1964-65		44 872	20 922	21 118	42 040	20 060	17 684	37 744	12 628	20 738	33 366
1965-66		48 870	19 200	24 589	43 789	19 010	20 670	39 680	12 761	24 651	37 412
		53 593	25 869	36 208	62 070	23 230	24 986	48 218	15 394	35 875	51 269
		72 021	29 791	33 359	63 153	30 078	31 805	61 881	15 095	37 411	52 504
		52 291	28 011	28 191	56 202	28 142	28 807	56 947	14 634	37 262	51 896
1969-70		59 534	32 326	29 805	62 131	32 170	34 282	66 452	14 675	36 347	51 022
1970-71		67 991	32 233	37 956	70 189	29 275	30 409	59 684	17 906	45 559	63 465
1971-72		70 083	32 219	32 100	64 319	31 699	38 018	69 717	19 262	42 374	61 636
1972-73		90 421	43 328	47 279	90 607	36 190	41 915	78 105	27 418	49 104	76 522
	(a)	100 719	57 579	49 546	107 125	48 259	40 687	88 946	38 416	58 947	97 363
		112 736	59 641	53 539	113 180	58 182	41 311	99 493	42 436	73 883	116 319
		160 390	94 481	62 360	156 840	77 130	67 979	145 109	65 067	75 427	140 494
		200 562	100 636	77 938	178 574	102 888	71 674	174 563	67 915	85 758	153 674
		187 729	95 941	96 314	192 255	105 701	87 319	193 019	61 583	99 732	161 316
		183 416	105 265	106 141	211 406	99 460	74 968	174 427	73 161	133 694	206 854
1979-80		195 912	95 771	82 821	178 591	106 452	111 180	217 633	62 278	117t250	179 529
		181 845	109 700	99 727	209 400	111 600	122 815	234 400	56 800	109 916	166 700
1981-82		188 493	88 800	92 800	181 600	93 500	98 000	191 400	48 500	106 100	154 500
		163 444	80 900	78 500	159 500	79 000	111 100	190 100	49 500	71 300	120 700
1983-84		229 678	122 000	80 000	202 000	107 300	105 500	212 900	63 600	46 400	110 000

<sup>(</sup>a) Alterations and additions to dwellings valued at \$10 000 and over are included with the value of dwellings up to 1972-73 but excluded thereafter; from 1973-74 the value of alterations and additions to dwellings valued at \$10 000 and over is included with 'other building'.

(Chapter 12)

### Land Settlement: Land Utilisation, Tasmania ('000 ha)

	_		Land settle	ement (a)			_	Land u	tilisation on i	ural estab	lishments
	Year (b)	L	and	Crown	land		Year	Area	under	Balance	Total area
	Tear (0)	Alienated	In process of alienation	Leased or licensed (c)	Other		reur	Crops (d)	Sown grasses (d)	of area	of rural estab.
860		1	242 ]			1860-61	***************************************	62 ]			
			540 }	(e)	(e)	1870-71	***************************************	64 }	(e)	(e)	(e)
			713 ]				***************************************	57			
			900	293	4 640			64	81		
900		1	957	513	4 364	1900-01		91	124	1 782	1 996
910		1 996	447	591	3 799	1910-11		116	200	1 862	2 178
920		2 121	390	920	3 402		***************************************	120	267	2 216	2 603
930		2 315	219	1 122	3 177	1930-31	***************************************	108	305	2 241	2 654
940		2 392	171	1 098	3 172	1940-41		103	313	2 282	2 698
941	·····	2 400	169	1 129	3 135	1941-42		114	318	2 316	2 748
			163	1 113	3 146		***************************************	121	n.a.	n.a.	2 641
			162	1 140	3 113			136	164	2 287	2 587
944		2 427	168	1 134	3 104			139	165	2 331	2 635
			165	1 123	3 107			132	234	2 256	2 622
946		2 448	161	1 110	3 115		***************************************	123	230	2 237	2 590
947		2 460	157	1 100	3 116	1947-48		112	223	2 167	2 502
		2 473	153	1 087	3 121			112	268	2 098	2 478
950		2 486	148	1 134	3 065			118	308	2 169	2 594
951	•••••	2 496	145	1 080	3 112	1950-51	***************************************	122	322	2 176	2 621
		2 5 1 4	142	1 108	3 069			124	237	2 155	2 605
953		2 525	139	1 111	3 058			130	326	2 198	2 654
954		2 5 3 4	137	1 055	3 107		***************************************	142	336	2 156	2 635
		2 5 1 6	134	1 018	3 136			132	363	2 177	2672
		2 554	126	1 010	3 143			137	400	2 145	2 682
957		2 561	127	655	3 490			122	424	2 088	2 634
958		2 568	84	623	3 558			122	458	2 070	2 649
		2 575	81	615	3 562	1958-59		144	461	2 055	2 660
960		2 584	77	618	3 554	1959-60		135	491	2 009	2 635
961		2 591	86	626	3 531	1960-61		153	487	1 995	2 635
		2 597	80	606	3 551			155	508	1 988	2 651
		2 602	80	586	3 565	1962-63		165	515	1 919	2 599
		2 670	89	628	3 446			158	552	1 871	2 581
		2 679	83	595	3 476			167	576	1 855	2 598
		2 677	84	540	3 531			158	622	1 849	2 629
		2 692	100	535	3 506			181	628	1 825	2 633
968		2 692	93	478	3 571			170	680	1 813	2 663
969 970		2 693 2 697	96 100	465 442	3 579 3 594	1968-69 1969-70		193 169	618 737	1 776 1 732	2 667 2 637
		2 702	20	***							
		2 702 2 697	99 100	381	3 651		***************************************	172	747	1 712	2 631
		2 729	133	274 248	3 760 3 723			147 80	772 856	1 688 1 656	2 607 2 592
		2 7 2 9	135	248	3 728		(f)	80 74	920	1 567	2 592
		2 755	159	223	3 693	1974-75		67	920 921	1 504	2 492
		2 751	154	229	3 696		(g)	60	935	1 464	2 492
		2 743	146	163	3 778		(g)	65	904	1 340	2 308
		2 517	120	165	4 028			70	910	1 302	2 281
979		2 494	96	148	4 092			80	904	1 247	2 232
		2 487	90	n.a.	n.a.			78	895	1 256	2 229
981		2 486	90	n.a.	n.a.	1980-81	***************************************	84	903	1 234	2 220
		2 590	_					90	910	1 168	2 168
		n.a.	n.a.	n.a. 4	235 n.a.			98	903	1 167	2 168
		n.a.	n.a.	n.a.	n.a.			101	905	1 155	2 162

<sup>(</sup>a) Area of State, 68 300 square kilometres.
(b) At 31 December until 1948; at 30 June for 1950 and subsequent years.
(c) Excludes areas under pulpwood concessions and exclusive forest permits.
(d) Area of sown grasses cut for hay, seed and green fodder is included under 'crops'.
(e) Not available on a comparable basis.
(f) From 1972-73 area of sown grasses cut for hay, seed and green fodder are included under 'sown grasses'.
(g) Not strictly comparable with earlier years due to changes in definition of a 'rural establishment'.

(Chapter 12)

Area and Production of Principal Crops, Tasmania

	Bar	ley for gr	ain	Oa	ts for gro	iin	Wh	eat for gr	ain		Blue peas	
Year	Area	Total produc- tion	Yield per hectare	Area	Total produc- tion	Yield per hectare	Area	Total produc- tion	Yield per hectare	Area	Total produc- tion	Yield per hectare
	ha	tonnes	tonnes	ha	tonnes	tonnes	ha	tonnes	tonnes	ha	tonnes	tonnes
860-61 870-71 880-81 890-91 900-01 910-11	2 524 3 082 3 358 1 771 1 822 2 119	3 676 3 844 2 269 2 657	1.14 1.19 1.14 1.28 1.46 1.53	12 263 12 523 8 034 8 393 18 240 25 854	16 844 12 568 7 990 9 444 25 580 37 515	1.37 1.00 0.99 1.13 1.40 1.45	26 891 23 222 20 243 13 133 20 973 21 142	38 267 24 240 20 271 17 378 30 011 30 290	1.42 1.04 1.00 1.32 1.43 1.43	n.a.	n.a.	n.a
920-21 921-22 922-23 923-24 924-25 925-26 926-27 927-28 928-29 929-30	2 114 2 293		1.47 1.29 1.50 1.26 0.95 0.97 1.48 1.56 1.21 1.35	20 426 22 113 23 801 20 825 18 686 14 869 19 571 17 381 15 217 15 807	27 530 28 066 30 450 24 723 19 381 15 191 24 673 25 452 18 389 21 365	1.35 1.27 1.28 1.19 1.04 1.02 1.26 1.46 1.21	11 446 11 325 10 216 5 869 5 242 7 726 9 386 8 531 9 134 6 801	15 294 15 599 15 394 8 260 6 254 10 692 14 513 20 896 12 306 10 158	1.34 1.38 1.51 1.41 1.19 1.38 1.55 2.45 1.35	3 476 4 182 3 532 2 927 3 112 3 324 3 043 3 672 3 960 4 097	5 212	1.4; 1.2; 1.24; 1.4; 1.0; 0.8; 1.3; 1.5; 1.1;
930-31 931-32 932-33 933-34 934-35 935-36 936-37 937-38 938-39 939-40	2 506 3 390 3 478 3 173 2 339 2 115 2 811 3 762 3 518 3 125	3 832 2 721 4 808 3 915 3 989 2 107 5 470 6 958 4 731 4 446	1.53 0.80 1.38 1.23 1.71 1.00 1.95 1.85 1.34	14 536 7 451 12 404 12 626 14 816 9 683 8 884 13 128 10 049 9 352	19 141 6 488 15 059 15 532 19 168 10 123 13 659 18 767 11 727 9 626	1.32 0.87 1.21 1.23 1.29 1.05 1.54 1.43 1.17	7 732 4 744 8 492 9 752 6 740 4 210 8 627 8 531 3 986 3 033	10 581 4 944 11 704 15 153 8 311 5 027 15 430 14 216 5 548 2 911	1.37 1.04 1.38 1.55 1.23 1.19 1.79 1.67 1.39 0.96	2 859 2 439 3 687 5 663 5 283 4 116 2 613 1 882 1 787 2 113	4 060 2 079 5 688 6 592 4 722 3 430 3 912 2 707 2 050 3 407	1.44 0.83 1.54 1.10 0.83 0.83 1.50 1.44 1.11
940-41 941-42 942-43 943-44 944-45 945-46 946-47 947-48 948-49 949-50	2 286 2 153 1 104 1 391 2 189 2 730 2 532 3 298 2 966 1 759	3 349 2 672 1 428 2 150 3 616 2 803 3 538 4 961 4 728 2 975	1.47 1.24 1.29 1.55 1.65 1.03 1.40 1.50 1.59	7 099 11 043 5 325 3 943 5 977 5 656 9 181 6 910 4 734 9 232	7 569 15 248 5 310 5 438 7 630 5 120 10 825 6 548 4 756 10 499	1.07 1.38 1.00 1.38 1.28 0.91 1.18 0.95 1.00	3 253 2 596 1 671 1 958 1 551 2 016 3 051 3 147 2 779 2 215	3 794 3 924 1 982 3 301 2 504 1 801 3 763 3 195 4 211 3 440	1.17 1.51 1.19 1.69 1.61 0.89 1.23 1.02 1.52 1.55	3 830 7 485 10 989 15 176 8 828 9 420 4 773 2 783 2 625 3 101	5 237 8 452 10 961 15 785 13 014 7 922 6 364 3 938 3 999 3 955	1.3 1.1: 1.00 1.0- 1.4' 0.8- 1.3: 1.4: 1.5: 1.2:
950-51 951-52 952-53 953-54 954-55 955-56 956-57 957-58 958-59 959-60	1 320 1 716 3 253 3 819 2 936 2 558 2 865 3 393 3 777 5 016	2 061 3 400 4 930 6 738 4 541 4 339 5 341 6 140 6 696 9 511	1.56 1.98 1.52 1.76 1.75 1.70 1.86 1.81 1.77	9 486 10 740 8 114 8 141 9 154 11 604 6 701 8 381 8 984 8 910	7 802 10 803 5 197 8 381 8 212 9 964 4 594 8 762 8 921 9 305	0.82 1.01 0.64 1.03 0.90 0.86 0.69 1.05 0.99	2 152 1 458 2 707 3 921 2 955 2 519 1 578 2 381 2 605 3 344	2 564 2 541 4 227 7 116 4 286 3 478 2 393 4 148 4 423 4 912	1.19 1.74 1.56 1.81 1.45 1.38 1.52 1.74 1.70	3 395 3 078 1 411 2 159 2 292 2 334 3 349 2 923 1 002 1 285	4 630 5 338 1 903 3 096 3 093 3 690 5 088 3 854 1 302 2 148	1.3 1.7 1.3 1.4 1.3 1.5 1.5 1.3 1.6
960-61 961-62 962-63 963-64 964-65 965-66 966-67 967-68 968-69 969-70	6 204 7 579 7 993 5 581 6 264 8 056 8 521 9 733 10 608 12 016	7 821 13 794 14 340 9 414 12 031 15 541 17 540 20 096 20 092 24 896	1.26 1.82 1.79 1.69 1.92 1.93 2.06 2.06 1.89 2.07	9 449 10 908 12 587 12 280 11 366 11 449 14 532 14 314 12 721 8 971	7 114 10 676 15 046 15 339 9 463 12 304 17 236 18 430 10 598 8 272	0.75 0.98 1.20 1.25 0.83 1.07 1.19 1.29 0.83 0.92	2 797 6 300 6 208 7 107 6 801 5 709 5 159 4 864 7 039 5 962	4 003 9 327 11 322 13 047 9 842 9 955 10 412 8 548 11 088 9 531	1.43 1.48 1.82 1.84 1.45 1.74 2.02 1.76 1.58 1.60	1 332 1 566 2 299 2 087 1 603 2 223 1 769 1 725 1 358 1 577	1 198 2 814 3 409 2 693 2 752 2 779 3 039 2 540 2 160 3 224	0.90 1.80 1.41 1.22 1.72 1.72 1.73 1.44 1.59 2.04
970-71 971-72 972-73 973-74 974-75 975-76 976-77 977-78 978-79 979-80	12 884 12 576 12 802 11 121 12 020 11 475 11 644 11 444 11 938 10 558	29 825 27 753 18 711 23 790 27 266 18 389 24 571 19 403 26 971 17 304	2.31 2.21 1.46 2.13 2.27 1.60 2.11 1.70 2.26 1.60	9 444 6 432 6 477 9 173 6 069 3 924 6 387 4 616 8 564 7 489	8 839 7 065 7 144 8 247 5 496 3 497 8 801 4 279 11 826 7 937	0.94 1.10 1.10 0.89 0.90 0.89 1.38 0.93 1.38	4 479 4 570 4 251 2 521 1 535 1 644 1 980 1 257 1 366 1 972	7 638 8 299 7 701 3 510 2 282 1 728 3 929 1 545 2 867 3 727	1.71 1.82 1.81 1.39 1.48 1.05 1.98 1.23 2.10	2 023 1 025 504 587 969 209 81 326 466 548	4 608 1 650 387 1 027 2 171 261 139 417 928 684	2.28 1.6 0.77 1.74 2.24 1.25 1.72 1.28 1.99
980-81	10 056 12 108 12 358 15 059	18 307 23 267 21 925 34 119	1.82 1.92 1.80 2.30	8 781 9 923 7 965 13 978	11 146 13 381 8 912 24 729	1.26 1.35 1.10 1.80	1 614 1 293 928 1 142	2 545 2 342 1 489 2 841	1.57 1.81 1.60 2.50	413 459 330 388	587 740 520 981	1.42 1.61 1.60 2.50

(Chapter 12)

Area and Production of Principal Crops, Tasmania—continued

		Potatoes			Hops		P	Pasture ha	<u></u>		Apples	
Year	Area	Total produc- tion	Yield per hectare	Bearing area	Total produc- tion	Yield per hectare	Area	Total produc- tion	Yield per hectare	Bearing area (a)	Total produc- tion	Yield per hectare
	ha	tonnes	tonnes	ha	tonnes	tonnes	ha	tonnes	tonnes	ha	tonnes	tonne
860-61	3 084		11.07	n.a.	n.a.	n.a.	12 880	63 318	4.92	1	2 267	1
870-71	3 975		9.21	260	339	1.30	13 602		3.04	1	2 8 1 9	1
880-81	4 217		7.84	230	292	1.27	12 794	36 459	2.85	n.a.	2 953	n.a
890-91	8 147		9.12	151	196	1.30	18 365	52 856	2.88	ſ	7 030	ſ
900-01	9 335		10.22	253	316	1.25	24 868		3.85		10 497	ļ
			6.71	420	805	1.92	29 539	117 039	3.96	,	25 681	J
920-21 921-22	12 950	90 102	6.96	516	845	1.64		179 636	3.91	10 364		4.3
922-23	13 924		7.34	572	995	1.74		139 190	3.76	10 829	56 982	5.2
923-24	14 989		7.38 6.77	599 604	986 1 040	1.65		169 967	4.20	10 372 10 393	59 592	5.7
924-25	14 638		5.88	605	1 040	1.72		146 614	3.73		36 006	3.4
925-26		68 422	5.09		791	1.67	22 472	123 054 116 764	3.46	10 383	42 103	4.0
926-27			8.43	483	974	1.64			3.12	10 311	78 719	7.6
	17 951			528		1.84		153 627	3.86	10 120	55 248	5.4
	15 094		7.86	514	1 119	2.18		126 929	3.66	10 237	89 025	8.7
	13 647		5.06 6.79	480 472	875 872	1.82 1.85		121 344 121 723	3.74 3.75	10 219 9 562	47 628 75 221	4.66 7.8
30-31	15 066	96 818	6.43	393	760	1.93	33 697	131 027	3.89	9 672	72 394	7.4
931-32		96 920	6.58	345	725	2.10	34 118		2.76	9 377		11.8
932-33	14 475	99 809	6.90	321	628	1.96		143 403	4.20	9 402	84 015	8.9
933-34	14 778	82 578	5.59	328	730	2.22		111 153	3.54	9 436	94 360	10.0
34-35	14 714	71 142	4.83	334	831	2.49		152 492	3.92	9 485	74 947	7.9
35-36	14 050		6.21	352	981	2.79	30 247		2.53	9 296	75 251	8.0
36-37	14 960	140 781	9.41	365	950	2.60		139 068	3.84	8 745	87 844	10.0
37-38	13 139	101 574	7,73	357	958	2.68		114 809	3.88	8 881	91 292	10.2
38-39	10 803	90 764	8.40	373	1 041	2.79		111 291	3.44		109 048	12.5
	12 323	116 245	9.43	368	808	2.20		143 674	3.69	8 850	98 075	11.08
40-41		115 871	7.66	369	1 351	3.66	30 789		3.14		113 277	12.8
941-42		111 613	9.00	427	1 280	3.00		149 997	4.00	8 970	121 107	13.5
42-43		138 112	8.44	448	1 183	2.64		111 721	3.36		109 410	12.3
143-44		221 296	9.04	435	1 267	2.91		156 303	3.89	8 896	152 846	17.18
44-45	32 817		4.55	441	1 102	2.50			3.82	8 723	125 165	14.33
45-46		239 930	10.54	445	904	2.03		118 958	2.95		162 353	18.6€
	17 493		9.91	490	1 005	2.05	42 093	172 103	4.09	8 544	80 548	9.43
47-48	16 342		8.88	506	1 113	2.20		139 857	4.10	8 239	150 389	18.25
948-49 949-50	13 079 13 804	133 915 123 958	10.24 8.98	508 518	694 977	1.37 1.89		153 118 158 151	4.18 4.28	7 826 7 661	48 828 91 330	6.24 11.92
950-51	12 780	125 990	9.86	518	1 125	2.17	39.007	163 301	4.19	7 378	92 359	12.52
951-52		153 424	12.03	531	778	1.47		175 051	4.42		93 921	12.91
052-53		116 338	8.13	524	1 367	2.61		195 289	4.39	7 273 7 200	71 575	9,94
53-54	13 971	146 616	10.49	518	973	1.88		245 459	4.92		101 047	14.07
54-55	10 606		9.68	539	1 353	2.51		160 495	4.11	6 890	95 426	13.85
55-56	8 434	79 181	9.39	531	1 437	2.71		265 619	4.79		112 896	16.24
56-57	7 740	91 140	11.78	569	974	1.71		242 209	4.86	6 754	64 792	9.59
57-58	8 780		11.75	571	1 302	2.28		208 062	4.67		126 403	18.58
58-59	6 550	87 279	13.32	579	1 535	2.65		306 923	4.93	6 651	94 931	14.27
259-60	6 283	99 573	15.85	581	1 270	2.19		224 778	4.39		104 266	16.02
60-61	4 401	39 677	9.02	569	1 279	2.25		331 206	4.79		106 571	16.64
961-62	4 504	72 709	16.14	571	1 287	2.25	63 632		4.56		149 436	23.95
62-63	5 600	83 870	14.98	588	1 298	2.21	66 952		4.75		119 297	19.03
63-64	4 373	66 470	15.20	592	717	1.21	60 557	253 175	4.18		162 791	25.88
64-65	3 801	57 978	15.25	597	947	1.59	72 947	370 204	5.07		118 250	18.81
65-66	4 853	77 626	16.00	603	1 392	2.31	59 824		4.37		159 343	25.48
66-67	4 159	74 476	17.91	594	948	1.60			5.40		120 040	19.47
67-68	4 435	80 327	18.11	608	1 363	2.24	72 373		4.34		151 322	25.02
68-69 69-70	4 638 3 790	73 278 67 995	15.80 17.94	616 565	1 582 1 268	2.57 2.24	85 212 69 526	502 159 367 340	5.89 5.28		135 986 140 977	23.19 24.29
70-71	3 640	72 591	19.94	452	1 077							
71-72	3 593	70 370	19.59	539	1 159	2.38 2.15		447 766 449 936	5.23 5.54		140 463 111 887	24.58
72-73	3 330	78 286	23.51	616	1 450							21.44
73-74	3 127	62 866	20.10	703	1 949	2.35 2.77		215 580	4.00 5.04		133 449 113 012	26.80
74-75	4 143	95 610	23.07	662	1 439	2.17		448 355 375 969	4.79			27.24
75-76	3 354	95 614	28.51	513	1 129	2.17				3 335	95 247 72 529	28.56
76-77		112 269	30.30	587		2.20		322 235 334 961	4.59	2 947		24.61
77-78		107 240	29.86		1 330				4.80	2 741	71 781	26.19
78-79		124 385		567 578	1 201	2.12		166 495	3.58	2 601	63 444	24.39
		136 197	34.12 33.10	578 620	1 457 1 183	2.52 1.90		295 464 243 527	4.49 4.20	2 693 2 661	85 230 74 434	31.65 28.00
779-80												
	4 225	155 065	35 07	672	1 550	2 22	61 555	241 917	2 02	2750	76.022	27.57
80-81 81-82	4 335 4 438	155 965 160 797	35.97 36.20	672 811	1 558 1 608	2.32 1.98		241 817 233 471	3.93 3.83	2 758 2 668	76 033 67 376	
80-81			35.97 36.20 36.50	672 811 889	1 558 1 608 1 589	2.32 1.98 1.80	60 939		3.93 3.83 3.20	2 758 2 668 2 545	76 033 67 376 69 421	27.57 25.25 27.30

(a) From 1980-81: total area.

# APPENDIX B

(Chapter 12)

Livestock Numbers: Production of Wool; Lambing, Tasmania

					Prod	luction of woo	ol (a)		
		Livest	ock (a)			Average	Production	Lan	nbing
Year	Horses	Cattle	Sheep	Pigs	Number of sheep and lambs shorn	yield per sheep and lamb shorn (including crutchings)	of wool (including dead, fell- mongered & exported on skins)	Ewes mated	Lambs marked
	'000	.000	'000	.000	'000	kg	'000 kg	'000	'000
1860 1870 1880 1890 1900	21 23 25 31 32 41	83 101 127 162 166 202	1 701 1 350 1 794 1 619 1 684 1 788	31 49 48 82 68 64	n.a.	n.a.	2 058 1 881 4 094 4 075 3 064 6 050	n.a.	n.a.
1920-21 1921-22 1922-23 1923-24 1924-25 1925-26 1926-27 1927-28 1928-29 1929-30	39 38 37 38 37 38 37 36 35	208 217 218 220 226 212 213 211 209 215	1 571 1 551 11558 1 558 1 614 1 619 1 808 1 905 2 001 2 091	38 50 46 47 47 41 39 42 48 53	1 551 1 428 1 503 1 507 1 630 1 639 1 738 1 859 1 902 1 983	2.94 3.25 3.26 3.13 3.16 3.18 2.93 2.99 3.22 3.14	5 218 5 278 5 542 5 312 5 662 5 699 5 594 6 021 6 759 6 804	416 506 524 517 557 554 563 629 640 679	299 378 411 392 423 390 433 488 502 534
1930-31 1931-32 1932-33 1933-34 1934-35 1935-36 1936-37 1937-38 1938-39 1939-40	33 31 30 30 31 31 31 32 30	230 232 251 262 262 270 262 255 262 252	2 120 2 012 2 041 2 035 2 038 2 140 2 234 2 521 2 626 2 677	55 41 41 38 40 45 40 43 45	1 961 1 913 1 940 1 991 1 976 2 010 1 106 2 460 2 432 2 509	3.11 3.14 3.16 2.91 2.90 3.37 2.72 2.60 3.03 3.08	6 713 6 668 6 895 6 441 6 366 7 394 6 381 7 076 7 946 8 316	695 647 679 686 672 735 791 873 940	547 478 526 517 497 586 594 722 737 756
1940-41 1941-42 1942-43 1943-44 1944-45 1945-46 1946-47 1947-48 1948-49 1949-50	29 29 27 26 26 25 24 23 22 21	259 253 245 230 225 216 220 244 266 275	2 682 2 398 2 227 2 188 2 156 1 926 1 933 2 087 2 160 2 170	47 45 49 46 47 47 47 45 37	2 517 2 416 2 293 2 260 2 235 2 015 2 005 2 085 2 198 2 255	2.78 3.04 2.98 2.93 2.79 2.73 3.04 3.18 3.09 2.97	7 746 7 704 7 827 8 130 7 404 7 411 7 549 6 952 7 641 7 692	988 844 785 811 756 701 577 779 803 800	764 669 655 669 629 509 440 656 662 652
1950-51 1951-52 1952-53 1953-54 1954-55 1955-56 1956-57 1957-58 1958-59 1959-60	20 19 18 17 16 15 14 13 12	272 226 275 295 319 332 354 371 374 375	2 182 2 338 2 422 2 465 2 595 2 673 2 943 3 298 3 536 3 494	45 47 39 46 58 49 52 63 69 67	2 245 2 379 2 502 2 553 2 715 2 733 3 082 3 388 3 673 3 834	2.99 3.42 3.19 3.16 3.53 3.45 3.78 3.50 3.57 3.44	7 824 9 305 8 984 9 124 10 794 10 624 13 009 13 234 14 803 15 241	774 839 894 916 968 979 1 150 1 266 1 381 1 461	637 726 768 788 884 877 1 056 1 199 1 269 1 354
1960-61 1961-62 1962-63 1963-64 1964-65 1965-66 1966-67 1967-68 1968-69 1969-70	9 9 8 8 7 n.a. 7	394 425 444 450 451 492 522 564 586 646	3 439 3 532 3 570 3 600 3 792 4 127 4 321 4 428 4 395 4 560	71 76 70 83 92 96 86 87 95	3 678 3 830 3 783 3 868 3 978 4 318 4 517 4 572 4 632 4 792	3.44 3.56 3.64 3.47 4.06 3.88 3.88 3.34 4.09 4.05	14 456 15 635 15 677 15 425 17 994 18 986 19 574 17 376 21 299 21 861	1 378 1 440 1 419 1 458 1 478 1 651 1 688 1 779 1 736 1 831	1 267 1 368 1 310 1 353 1 374 1 594 1 574 1 522 1 561 1 715
1970-71 1971-72 1972-73 1973-74 1973-74 1974-75 1975-76 1976-77 1977-78 1978-79 1979-80	n.a.	733 829 900 884 921 909 819 733 657 649	4 517 4 237 3 824 3 964 4 136 4 249 4 015 3 969 4 157 4 245	113 104 85 68 64 70 65 64 61	4 806 4 607 4 251 4 101 4 153 4 352 4 229 4 242 4 319 4 550	3.99 4.03 3.76 3.90 4.12 4.13 3.82 4.00 4.04 4.00	21 671 21 063 18 154 17 549 18 888 19 951 18 109 18 294 19 079 20 003	1 889 1 805 1 604 1 535 1 644 1 677 1 640 1 672 1 712 1 861	1 705 1 617 1 369 1 361 1 466 1 515 1 378 1 529 1 582 1 706
1980-81   1981-82   1982-83 1983-84	n.a. 7 6	659 628 559 542	4 381 4 513 4 451 4 583	54 47 51 48	4 627 4 841 4 901 4 845	3.91 4.10 4.04 4.15	20 049 21 783 21 680 21 887	1 892 2 010 2 035 2 014	1 674 1 843 1 853 1 794

<sup>(</sup>a) Up to 1925-26 numbers recorded were at varying dates in the years shown; from 1926 to 1940 at 31 December; from 1941-42 at 31 March.

# STATISTICAL SUMMARY

(Chapter 12)

# Livestock Slaughtered (a) for Human Consumption, Tasmania

		Cattle ar	nd calves		St	Pigs		
Year	Bulls, bul- locks & steers	Cows and heifers	Calves	Total	Sheep	Lambs	Total	Pigs
1924-25	21 068	12 544	2 542	36 154	212 983	63 134	276 117	55 229
1929-30	20 430	13 034	1814	35 278	228 090	113 437	341 527	64 287
1939-40	32 685	12 110	3 633	48 428	248 372	212 585	460 957	73 398
1944-45	27 290	14 356	4 701	46 527	323 797	185 616	509 413	58 068
1949-50	29 331	23 736	4 580	57 647	245 691	262 360	508 051	50 861
1950-51	32 199	28 921	8 637	69 757	234 084	250 535	484 619	57 787
1951-52	33 352	29 506	8 729	71 587	226 377	256 116	482 493	65 893
1952-53	32 913	25 270	12 297	70 480	269 776	306 739	576 515	65 520
1953-54	22 630	25 188	13 955	61 773	286 665	307 326	593 991	59 473
1954-55	26 741	32 871	15 333	74 945	287 103	356 103	643 206	79 305
1955-56	32 259	36 370	19 786	88 415	256 188	388 802	644 990	87 609
1956-57	38 494	38 341	25 195	102 030	280 082	403 859	683 941	82 032
1957-58	42 028	45 294	30 534	117 856	283 242	451 214	734 456	90 593
1958-59	42 525	49 046	35 923	127 494	362 988	546 196	909 184	107 489
1959-60	47 147	56 885	40 548	144 580	504 961	661 470	1 166 431	114 538
1960-61	35 515	43 309	36 170	114 994	474 690	601 042	1 075 732	111 457
1961-62	42 614	48 638	44 230	135 482	510 626	649 306	1 159 932	120 450
1962-63	49 510	62 317	46 149	157 976	465 996	628 757	1 094 753	115 424
1963-64	51 518	70 885	53 823	176 226	544 945	582 113	1 127 058	123 502
1964-65	52 946	70 510	50 610	174 066	424 810	562 135	986 945	134 526
1965-66	47 066	60 664	46 514	154 244	566 671	597 197	1 163 868	146 266
1966-67	52 475	67 206	50 789	170 470	552 235	606 859	1 159 094	148 913
1967-68	57 871	66 016	47 872	171 759	600 124	524 850	1 124 974	142 986
1968-69		64 160	45 236	177 772	567 501	673 446	1 240 947	138 954
1969-70	78 618	66 473	32 765	177 856	608 311	688 664	1 296 975	160 112
1970-71	78 926	61 139	22 011	162 076	713 204	680 679	1 393 883	170 579
1971-72	96 255	69 186	19 346	184 787	812 960	662 193	1 475 153	165 007
1972-73		110 177	25 933	260 782	636 501	641 718	1 278 219	152 004
1973-74		103 552	29 554	259 357	335 566	489 697	825 263	115 625
1974-75		75 382	37 450	262 117	402 813	577 119	979 932	101 359
1975-76		119 418	64 536	348 013	454 912	613 611	1 068 532	94 090
1976-77		139 910	72 888	357 708	469 125	523 522	992 647	99 603
1977-78		132 802	68 686	362 465	386 772	650 067	1 036 839	92 474
1978-79		103 152	54 466	281 209	345 388	502 890	848 278	90 520
1979-80		83 000	39 500	218 100	316 900	613 200	930 100	88 700
1980-81	95 856	86 084	42 170	224 110	403 273	646 903	1 050 176	88 564
1981-82		91 491	53 830	251 890	451 978	690 711	1 142 689	77 163
1982-83		106 467	59 604	275 548	563 288	764 383	1 327 671	77 251
1983-84		73 236	46 398	200 001	418 917	756 941	1 175 858	80 224

(a) Including livestock slaughtered on farms.

(Chapter 12)

Value of Agricultural Commodities Produced, Tasmania (\$ million)

	Crops (a)		Livestock slaughterings and other disposals		Livestock	products	Total agriculture		
Year	Gross	Local	Gross	Local	Gross	Local	Gross	Local	
970-71	40.1	29.2	28.1	25.9	41.9	40.2	110.2	95.3	
971-72	33.7	24.0	31.5	29.0	47.0	45.1	112.2	98.1	
972-73	40.0	28.3	43.6	40.4	64.8	61.7	148.4	130.3	
973-74	46.6	37.0	58.0	54.0	60.0	57.3	164.7	148.2	
974-75	49.4	39.7	31.7	29.1	56.5	53.1	137.6	121.9	
975-76	43.0	35.2	34.1	31.0	60.7	57.0	137.7	123.3	
976-77	55.7	48.7	46.1	42.2	72.1	68.2	173.9	159.1	
977-78	54.0	47.8	54.8	47.9	76.1	72.2	184.8	167.9	
978-79	76.9	68.8	91.7	80.2	86.7	82.7	255.4	231.6	
979-80	70.4	61.7	100.3	87.4	93.7	89.0	264.4	238.0	
980-81	80.3	71.1	94.1	82.4	100.2	95.1	274.6	248.6	
981-82	92.3	81.4	90.2	78.8	117.7	112.7	300.2	272.9	
982-83	106.3	93.8	100.7	87.9	131.5	126.3	340.4	309.4	
983-84	132.8	120.6	95.6	83.2	123.3	117.5	351.7	321.3	

<sup>(</sup>a) Excludes crops and pasture harvested for green feed or silage.

(Chapter 12)

# Production of Meat, Tasmania (Tonnes: Carcass Weight)

Year	Beef and veal			М	utton and lar		- ·	
	Beef	Veal	Total	Mutton	Lamb	Total	Pigmeat (a)	Total
1924-25	8 2	33	8 233	4 154	888	5 042	2 561	15 836
1929-30	8 1	53	8 153	4 448	1 595	6 043	2 848	17.044
1939-40	10 626	165	10 791	4 845	2 989	7 834	3 560	22 185
1949-50	12 299	169	12 468	4 896	4 173	9 069	2 597	24 134
955-56	15 133	530	15 663	5 260	6 707	11 967	3 693	31 323
1956-57	17 592	612	18 204	5 812	6 998	12 810	3 402	34 416
957-58	19 635	726	20 361	5 694	7 739	13 433	4 284	38 078
958-59	19 893	839	20 732	7 444	9 223	16 667	4 990	42 389
959-60	22 610	906	23 516	10 267	10 846	21 113	5 438	50 067
960-61	16 388	777	17 165	9 513	9 715	19 228	5 138	41 531
961-62	19 076	910	19 989	10 228	10 326	20 554	5 515	46 058
962-63	23 076	999	24 075	9 614	10 083	19 697	5 549	49 321
963-64	24 988	1 337	26 325	11 101	9 300	20 401	6 022	52 748
964-65	25 741	951	26 692	9 225	9 189	18 414	6 691	51 797
965-66	22 429	951	23 380	11 697	9 739	21 436	7 136	51 952
966-67	24 124	967	25 091	11 412	9 825	21 237	7 279	53 607
967-68	24 509	977	25 486	11 666	8 497	20 163	7 001	52 650
968-69	27 583	802	28 385	11 701	11 112	22 813	7 137	58 335
969-70	30 909	599	31 509	12 767	11 282	24 049	8 007	63 564
970-71	29 481	398	29 879	14 755	11 318	26 073	8 530	64 482
971-72	34 422	374	34 796	16 314	10 875	27 189	8 266	70 251
972-73	46 946	525	47 471	12 201	10 327	22 528	7 389	77 388
973-74	45 669	613	46 282	6 672	8 096	14 768	5 477	66 527
974-75	47 592	721	48 313	7 984	9 508	17 492	4 872	70 677
975-76	57 924	1 242	59 166	8 997	9 849	18 846	4 516	82 529
976-77	55 790	1 613	57 403	8 494	8 189	16 683	4 946	79 032
977-78	59 779	1 556	61 335	7 035	9 849	16 884	4 785	83 004
978-79	46 269	1 152	47 421	6 833	7 883	14 716	4 834	66 971
979-80	36 561	835	37 396	5 656	9 017	14 673	4 862	56 931
980-81	36 812	924	37 736	7 420	9 976	17 396	4 767	59 899
981-82	40 561	1 266	41 827	8 492	10 647	19 139	4 262	65 228
982-83	43 518	1 376	44 894	10 364	11 840	22 204	4 196	71 294
983-84	31 374	960	32 334	8 177	11 745	19 922	4 315	56 572

(a) Includes pork for manufacture into bacon and ham.

(Chapter 12)

Weighted Average Prices Paid To Farmers Per Unit of Selected Farm Products, Tasmania (\$ per tonne)

		Cereal for grain		Hops	Orchard fruit		Small fruit		Vegetables		Wool,
Year	Wheat	Barley	Apples		Pears	Currants	Rasp- berries	Potatoes	Peas	greasy	
		18	15	198	17	23	40	40	13	n.a.	220
1934-35		12	13	309	28	28	40	40	17	n.a.	200
1939-40		12	17	331	23	25	70	70	18	n.a.	260
1944-45		18	23	397	20	20	90	70	25	n.a.	350
1949-50		50	32	772	64	73	130	130	30	n.a.	1 320
		50	74	1 213	101	114	180	180	79	30	1 410
1959-60		51	59	1 389	99	100	220	200	39	28	1 150
1960-61	***************************************	51	63	1 367	102	126	260	180	89	31	1 060
1961-62		59	64	1 433	104	87	260	220	52	26	1 080
1962-63		54	61	1 433	112	122	240	220	25	60	1 210
1963-64		53	63	1 433	107	111	260	220	64	115	1 480
1964-65		49	61	1 499	113	129	220	220	116	103	1 080
1965-66		51	58	1 565	100	68	200	220	37	96	1 230
1966-67		53	63	1 653	124	119	240	240	54	108	1 120
1967-68	***************************************	54	66	1 698	110	102	290	310	48	117	960
1968-69		42	57	1 698	107	124	290	330	29	111	1 050
1969-70		53	52	1 698	110	136	310	330	46	99	880
1970-71		48	- 51	1 698	103	134	330	350	42	119	740
1971-72		54	47	1 874	103	117	330	350	37	115	1 900
1972-73		52	52	1 961	121	174	350	350	57	106	2 290
1973-74		104	77	1 649	121	117	390	410	87	116	1 920
1974-75		104	92	860	149	181	470	530	59	131	1 370
1975-76		97	99	1 395	173	171	500	500	77	147	1 570
1976-77	***************************************	82	111	1 695	165	195	550	580	83	156	2 100
1977-78		86	121	1 957	202	261	700	740	83	158	2 090
1978-79		109	122	2 202	195	248	720	870	102	158	2 340
1979-80		128	124	2 553	223	284	780	950	104	159	2 700
1980-81		139	150	3 002	220	352	800	1 080	110	177	2 770
1981-82		136	162	3 183	281	331	666	1 173	116	223	2 820
1982-83		139	182	4 355	369	446	549	915	130	243	2 717
1983-84		159	171	4 980	401	553	654	896	134	245	2 958

(Chapter 13)

Assayed Contents of Metallic Minerals Produced: Coal Production, Tasmania

Year	Cadmium Copper		Gold	Iron	Lead	Manganese	
	tonnes	tonnes	kg	tonnes	tonnes	tonnes	
953	73	9 045	528		10 199	_	
955	50	8 529	525		11 448		
960	57	11 867	747	_	13 249	175	
061	63	12 947	836		12 450	188	
962	73	14 748	999		14 991	268	
63	75	17 075	1 133	_	15 222	262	
064	78	15 118	1 069		15 594	247	
065	71	15 411	1 023	_	14 466	237	
066	76	17 278	1 135	www	15 828	258	
067	74	17 540	1 167	-	15 375	247	
068	75	16 867	1 135	502 462	15 152	250	
969	77	18 983	1 252	1 388 328	15 145	258	
70	70	23 934	1 335	1 346 065	13 934	209	
71	84	25 525	1 793	1 497 486	16 617	509	
72	138	28 298	2 021	1 623 450	26 806	2 205	
973	178	25 821	1 511	1 678 146	20 236	2 399	
74	126	29 086	1 586	1 514 373	19 017	385	
75	167	26 460	1 668	1 431 041	19 552	265	
976	157	25 342	1 495	1 542 306	18 034	232 427	
977 978	199 188	22 002 23 908	1 891 1 912	1 413 476 1 446 024	22 800 22 754	341	
779	188	22 591	1 747	1 528 225	22 160	269	
980	119	23 013	1 311	1 472 923	15 511	198	
981	181	22 402	1 950	1 543 938	25 517	249	
				1 242 220			
JX /	197	20 906	1 737	1 442 056	30.619	781	
	197 207	20 906 27 516	1 737 2 077	1 442 056 1 533 922	30 619 34 777	281 282	
982 983		20 906 27 516	1 737 2 077	1 442 056 1 533 922	30 619 34 777	282	
983	207 Silver	27 516 Sulphur	2 077	1 533 922  Tungstic oxide (WO <sub>3</sub> )	34 777 Zinc	282 Coal production	
Year	207 Silver	27 516  Sulphur  tonnes	2 077  Tin  tonnes	Tungstic oxide (WO <sub>3</sub> )	Zinc tonnes	282 Coal production tonnes	
Year	207  Silver  kg 38 599	27 516  Sulphur  tonnes 42 516	2 077  Tin  tonnes 801	1 533 922  Tungstic oxide (WO <sub>3</sub> )  tonnes 1 069	34 777  Zinc  tonnes 30 247	Coal production tonnes 237 370	
Year	207 Silver	27 516  Sulphur  tonnes	2 077  Tin  tonnes	Tungstic oxide (WO <sub>3</sub> )	Zinc tonnes	Coal production tonnes 237 370 304 023	
Year  153	207 Silver kg 38 599 36 267	27 516  Sulphur  tonnes 42 516 38 857	2 077  Tin  tonnes 801 867	1 533 922  Tungstic oxide (WO <sub>3</sub> )  tonnes 1 069 1 358	34 777  Zinc  tonnes 30 247 28 396	282 Coal production tonnes 237 370 304 023 302 448	
Year  153	207  Silver  kg 38 599 36 267 43 483	27 516  Sulphur  tonnes 42 516 38 857 55 636	2 077  Tin  tonnes  801 867 898	1 533 922  Tungstic oxide (WO <sub>3</sub> )  tonnes 1 069 1 358 1 115	34 777  Zinc  tonnes 30 247 28 396 35 069	282  Coal production  tonnes 237 370 304 023 302 448 259 934	
Year  153	207  Silver  kg 38 599 36 267 43 483  45 162	27 516  Sulphur  tonnes 42 516 38 857 55 636 53 128	2 077  Tin  tonnes  801 867 898	1 533 922  Tungstic oxide (WO <sub>3</sub> )  tonnes 1 069 1 358 1 115 1 543 1 052 975	34 777  Zinc  tonnes 30 247 28 396 35 069 40 735	282  Coal production  tonnes 237 370 304 023 302 448 259 934 26 713 210 243	
Year  153 155 155 160 161 162 163	207  Silver  kg 38 599 36 267 43 483  45 162 52 876	27 516  Sulphur  tonnes 42 516 38 857 55 636 53 128 37 145	2 077  Tin  tonnes 801 867 898 893 1 075	1 533 922  Tungstic oxide (WO <sub>3</sub> )  tonnes 1 069 1 358 1 115 1 543 1 052 975 1 009	34 777  Zinc  tonnes 30 247 28 396 35 069 40 735 48 687	282  Coal production  tonnes 237 370 304 023 302 448 259 934 276 713 210 243 153 587	
Year  153	207  Silver  kg 38 599 36 267 43 483  45 162 52 876 52 969 55 364 52 192	27 516  Sulphur  tonnes 42 516 38 857 55 636 53 128 37 145 42 997 57 004 54 840	2 077  Tin  tonnes  801 867 898  893 1 075 1 021 1 006 1 043	1 533 922  Tungstic oxide (WO <sub>3</sub> )  tonnes  1 069 1 358 1 115 1 543 1 052 975 1 009 1 196	34 777  Zinc  tonnes 30 247 28 396 35 069 40 735 48 687 49 267 50 960 47 053	282  Coal production  tonnes 237 370 304 023 302 448 259 934 276 713 210 243 153 587 104 101	
Year  153  155  1660  161  162  163  164  165  1665	207  Silver  kg 38 599 36 267 43 483  45 162 52 876 52 969 55 364 52 192 57 013	27 516  Sulphur  tonnes 42 516 38 857 55 636 53 128 37 145 42 997 57 004 54 840 63 804	2 077  Tin  tonnes  801 867 898  893 1 075 1 021 1 006 1 043 1 047	1 533 922  Tungstic oxide (WO <sub>3</sub> )  tonnes 1 069 1 358 1 115 1 543 1 052 975 1 009 1 196 1 327	34 777  Zinc  tonnes 30 247 28 396 35 069  40 735 48 687 49 267 50 960 47 053 50 651	282  Coal production  tonnes 237 370 304 023 302 448 259 934 276 713 210 243 153 587 104 101 83 990	
Year  253 255 255 266 261 262 263 264 265 266 266 266 266 266 266 266 266 266	207  Silver  kg 38 599 36 267 43 483  45 162 52 876 52 969 55 364 52 192 57 013 55 955	27 516  Sulphur  tonnes 42 516 38 857 55 636 53 128 37 145 42 997 57 004 54 840 63 804 62 470	2 077  Tin  tonnes  801 867 898  893 1 075 1 021 1 006 1 043 1 047 1 553	1 533 922  Tungstic oxide (WO <sub>3</sub> )  tonnes  1 069 1 358 1 115  1 543 1 052 975 1 009 1 196 1 327 1 202	34 777  Zinc  tonnes 30 247 28 396 35 069  40 735 48 687 49 267 50 960 47 053 50 651 49 641	282  Coal production  tonnes 237 370 304 023 302 448 259 934 276 713 210 243 153 587 104 101 83 990 77 769	
Year  153	207  Silver  kg 38 599 36 267 43 483  45 162 52 876 52 969 55 364 52 192 57 013 55 955 54 400	27 516  Sulphur  tonnes 42 516 38 857 55 636 53 128 37 145 42 997 57 004 54 840 63 804 62 470 53 926	2 077  Tin  tonnes  801 867 898  893 1 075 1 021 1 006 1 043 1 047 1 553 3 154	1 533 922  Tungstic oxide (WO <sub>3</sub> )  tonnes 1 069 1 358 1 115  1 543 1 052 975 1 009 1 196 1 327 1 202 1 425	34 777  Zinc  tonnes 30 247 28 396 35 069  40 735 48 687 49 267 50 960 47 053 50 651 49 641 48 919	282  Coal production  tonnes 237 370 304 023 302 448 276 713 210 243 153 587 104 101 83 990 77 769 92 389	
Year  Year  153	207  Silver  kg 38 599 36 267 43 483  45 162 52 876 52 969 55 364 52 192 57 013 55 955 54 400 54 213	27 516  Sulphur  tonnes 42 516 38 857 55 636 53 128 37 145 42 997 57 004 54 840 63 804 62 470 53 926 47 449	2 077  Tin  tonnes  801 867 898  893 1 075 1 021 1 006 1 043 1 047 1 553 3 154 4 853	1 533 922  Tungstic oxide (WO <sub>3</sub> )  tonnes  1 069 1 358 1 115  1 543 1 052 975 1 009 1 196 1 327 1 202 1 425 1 524	34 777  Zinc  tonnes 30 247 28 396 35 069  40 735 48 687 49 267 50 960 47 053 50 651 49 641 48 919 50 898	282  Coal production  tonnes 237 370 304 023 302 448 259 934 276 713 210 243 153 587 104 101 83 990 77 769 92 389 117 794	
Year  153	207  Silver  kg 38 599 36 267 43 483  45 162 52 876 52 969 55 364 52 192 57 013 55 955 54 400	27 516  Sulphur  tonnes 42 516 38 857 55 636 53 128 37 145 42 997 57 004 54 840 63 804 62 470 53 926	2 077  Tin  tonnes  801 867 898  893 1 075 1 021 1 006 1 043 1 047 1 553 3 154	1 533 922  Tungstic oxide (WO <sub>3</sub> )  tonnes 1 069 1 358 1 115  1 543 1 052 975 1 009 1 196 1 327 1 202 1 425	34 777  Zinc  tonnes 30 247 28 396 35 069  40 735 48 687 49 267 50 960 47 053 50 651 49 641 48 919	282  Coal production  tonnes 237 370 304 023 302 448 259 934 276 713 210 243 153 587 104 101 83 990 77 769 92 389	
Year  253	207  Silver  kg 38 599 36 267 43 483  45 162 52 876 52 969 55 364 52 192 57 013 55 955 54 400 54 213 53 343	27 516  Sulphur  tonnes 42 516 38 857 55 636  53 128 37 145 42 997 57 004 54 840 63 804 62 470 53 926 47 449 84 502	2 077  Tin  tonnes  801 867 898  893 1 075 1 021 1 006 1 043 1 047 1 553 3 154 4 853 5 018	1 533 922  Tungstic oxide (WO <sub>3</sub> )  tonnes  1 069 1 358 1 115 1 543 1 052 975 1 009 1 196 1 327 1 202 1 425 1 524 1 434	34 777  Zinc  tonnes 30 247 28 396 35 069  40 735 48 687 49 267 50 960 47 053 50 651 49 641 48 919 50 898 46 922 52 749	282  Coal production  tonnes 237 370 304 023 302 448 259 934 276 713 210 243 153 587 104 101 83 990 77 769 92 389 117 794 113 529	
Year  Year  153 155 155 160 161 162 163 164 165 166 166 167 170 1770 1772	207  Silver  kg 38 599 36 267 43 483  45 162 52 876 52 969 55 364 52 192 57 013 55 955 54 400 54 213 53 343  63 389 99 251	27 516  Sulphur  tonnes 42 516 38 857 55 636 53 128 37 145 42 997 57 004 63 804 62 470 53 926 47 449 84 502 109 046 164 884	2 077  Tin  tonnes  801 867 898  893 1 075 1 021 1 006 1 043 1 047 1 553 3 154 4 853 5 018 6 166 6 825	1 533 922  Tungstic oxide (WO <sub>3</sub> )  tonnes  1 069 1 358 1 115 1 543 1 052 975 1 009 1 196 1 327 1 202 1 425 1 524 1 434 1 742 1 918	34 777  Zinc  tonnes 30 247 28 396 35 069 40 735 48 687 49 267 50 960 47 053 50 651 49 641 48 919 50 898 46 922 52 749 85 580	282  Coal production  tonnes 237 370 304 023 302 448 259 934 276 713 210 243 153 587 104 101 83 990 77 769 92 389 117 794 113 529 123 922 123 922	
Year  Year  153  155  160  161  162  163  164  165  166  167  168  169  171  171  172  173	207  Silver  kg 38 599 36 267 43 483  45 162 52 876 52 969 55 364 52 192 57 013 55 955 54 400 54 213 53 343  63 389 99 251 76 903	27 516  Sulphur  tonnes 42 516 38 857 55 636 53 128 37 145 42 997 57 004 54 840 63 804 62 470 63 926 47 449 84 502 109 046 164 884 160 971	2 077  Tin  tonnes  801 867 898  893 1 075 1 021 1 006 1 043 1 047 1 553 3 154 4 853 5 018  6 166 6 825 5 674	1 533 922  Tungstic oxide (WO <sub>3</sub> )  tonnes 1 069 1 358 1 115  1 543 1 052 975 1 009 1 196 1 327 1 202 1 425 1 524 1 434  1 742 1 918 1 502	34 777  Zinc  tonnes 30 247 28 396 35 069  40 735 48 687 49 267 50 960 47 053 50 651 49 641 48 919 50 898 46 922 52 749 85 580 63 792	282  Coal production  tonnes 237 370 304 023 302 448 259 934 276 713 210 243 153 587 104 101 83 990 77 769 92 389 117 794 113 529 123 922 132 242 114 588	
Year  Year  953  961  962  963  964  965  966  977  977  977  977  977  977	207  Silver  kg 38 599 36 267 43 483  45 162 52 876 52 969 55 364 52 192 57 013 55 955 54 400 54 213 53 343  63 389 99 251 76 903 80 180	27 516  Sulphur  tonnes 42 516 38 857 55 636 53 128 37 145 42 997 57 004 54 840 63 804 62 470 53 926 47 449 84 502  109 046 164 884 160 971 153 767	2 077  Tin  tonnes  801 867 898  893 1 075 1 021 1 006 1 043 1 047 1 553 3 154 4 853 5 018  6 166 6 825 5 674 5 950	1 533 922  Tungstic oxide (WO <sub>3</sub> )  tonnes  1 069 1 358 1 115  1 543 1 052 975 1 009 1 196 1 327 1 202 1 425 1 524 1 434  1 742 1 918 1 502 1 304	Zinc  tonnes 30 247 28 396 35 069 40 735 48 687 49 267 50 960 47 053 50 651 49 641 48 919 50 898 46 922 52 749 85 580 63 792 65 311	282  Coal production  tonnes 237 370 304 023 302 448 259 934 276 713 210 243 153 587 104 101 83 990 77 769 92 389 117 794 113 529 123 922 132 242 14 588 127 460	
Year  Year  1953 1955 1955 1960 1961 1962 1963 1964 1965 1966 1967 1977 1977 1977 1977 1977 1977	207  Silver  kg 38 599 36 267 43 483  45 162 52 876 52 969 55 364 52 192 57 013 55 955 54 400 54 213 53 343  63 389 99 251 76 903 80 180 76 401	27 516  Sulphur  tonnes  42 516 38 857 55 636  53 128 37 145 42 997 57 004 54 840 63 804 62 470 53 926 47 449 84 502  109 046 164 884 160 971 153 767 152 884	2 077  Tin  tonnes  801 867 898  893 1 075 1 021 1 006 1 043 1 047 1 553 3 154 4 853 5 018  6 166 6 825 5 674 5 950 5 489	1 533 922  Tungstic oxide (WO <sub>3</sub> )  tonnes  1 069 1 358 1 115  1 543 1 052 975 1 009 1 196 1 327 1 202 1 425 1 524 1 434  1 742 1 918 1 502 1 304 1 712	34 777  Zinc  tonnes 30 247 28 396 35 069  40 735 48 687 49 267 50 960 47 053 50 651 49 641 48 919 50 898 46 922  52 749 85 580 63 792 65 311 67 476	282  Coal production  tonnes 237 370 304 023 302 448 259 934 276 713 210 243 153 587 104 101 83 990 77 769 92 389 117 794 113 529 123 922 124 242 14 588 127 460 161 922	
Year  Year  153  155  155  166  166  166  166  167  168  169  170  171  177  177  177  177  177  17	207  Silver  kg 38 599 36 267 43 483  45 162 52 876 52 969 55 364 52 192 57 013 55 955 54 400 54 213 53 343  63 389 99 251 76 903 80 180 76 401 71 310	27 516  Sulphur  tonnes 42 516 38 857 55 636 53 128 37 145 42 997 57 004 54 840 63 804 62 470 53 926 47 449 84 502  109 046 164 884 160 971 153 767 152 884 154 008	2 077  Tin  tonnes  801 867 898  893 1 075 1 021 1 006 1 043 1 047 1 553 3 154 4 853 5 018  6 166 6 825 5 674 5 950 5 489 6 883	1 533 922  Tungstic oxide (WO <sub>3</sub> )  tonnes  1 069 1 358 1 115 1 543 1 052 975 1 009 1 196 1 327 1 202 1 425 1 524 1 434  1 742 1 918 1 502 1 304 1 712 2 202	Zinc  Lonnes 30 247 28 396 35 069  40 735 48 687 49 267 50 960 47 053 50 651 49 641 48 919 50 898 46 922  52 749 85 580 63 792 65 311 67 476 62 004	282  Coal production  tonnes 237 370 304 023 302 448 259 934 276 713 210 243 153 587 104 101 83 990 77 769 92 389 117 794 113 529 123 922 132 242 114 588 127 460 161 922 189 489	
Year  Year  Year  153 155 155 160 161 162 163 164 165 166 167 170 177 177 177 177 177 177 177 177 17	207  Silver  kg 38 599 36 267 43 483  45 162 52 876 52 969 55 364 52 192 57 013 55 955 54 400 54 213 53 343  63 389 99 251 76 903 80 180 76 401 71 310 84 772	27 516  Sulphur  tonnes  42 516 38 857 55 636  53 128 37 145 42 997 57 004 63 804 62 470 53 926 47 449 84 502  109 046 164 884 160 971 153 767 152 884 154 008 163 486	2 077  Tin  tonnes  801 867 898  893 1 075 1 021 1 006 1 043 1 047 1 553 3 154 4 853 5 018  6 166 6 825 5 674 5 950 5 489 6 853 6 634	1 533 922  Tungstic oxide (WO <sub>3</sub> )  tonnes  1 069 1 358 1 115  1 543 1 052 975 1 009 1 196 1 327 1 202 1 425 1 524 1 434  1 742 1 918 1 502 1 304 1 712 2 202 2 534	34 777  Zinc  tonnes 30 247 28 396 35 069 40 735 48 687 49 267 50 960 47 053 50 651 49 641 48 919 50 898 46 922  52 749 85 580 63 792 65 311 67 476 62 004 78 405	282  Coal production  tonnes 237 370 304 023 302 448 259 934 276 713 210 243 153 587 104 101 83 990 77 769 92 389 117 794 113 529 123 242 14 588 127 466 161 922 189 489 198 966	
Year  Year  153  155  155  166  166  166  166  167  168  169  170  171  177  177  177  177  177  17	207  Silver  kg 38 599 36 267 43 483  45 162 52 876 52 969 55 364 52 192 57 013 55 955 54 400 54 213 53 343  63 389 99 251 76 903 80 180 76 401 71 310	27 516  Sulphur  tonnes 42 516 38 857 55 636 53 128 37 145 42 997 57 004 54 840 63 804 62 470 53 926 47 449 84 502  109 046 164 884 160 971 153 767 152 884 154 008	2 077  Tin  tonnes  801 867 898  893 1 075 1 021 1 006 1 043 1 047 1 553 3 154 4 853 5 018  6 166 6 825 5 674 5 950 5 489 6 883	1 533 922  Tungstic oxide (WO <sub>3</sub> )  tonnes  1 069 1 358 1 115 1 543 1 052 975 1 009 1 196 1 327 1 202 1 425 1 524 1 434  1 742 1 918 1 502 1 304 1 712 2 202	Zinc  Lonnes 30 247 28 396 35 069  40 735 48 687 49 267 50 960 47 053 50 651 49 641 48 919 50 898 46 922  52 749 85 580 63 792 65 311 67 476 62 004	282  Coal production  tonnes 237 370 304 023 302 448 259 934 276 713 210 243 153 587 104 101 83 990 77 769 92 389 117 794 113 529 123 922 132 242 114 588 127 460	

345 951 514 986 472 625

# APPENDIX B

(Chapter 13)

## Fisheries, Tasmania

Year (	D	Persons engaged (a)	Production (b)							
	Boats engaged (a)		Fish				·	G - U -	42 1	Gross value of
	(4)		Snoek (barracouta)	Salmon	Shark	Other	Southern rock lobster	Scallops	Abalone	production (c)
	no.	no.	'000 kg	'000 kg	'000 kg	'000 kg	'000 kg	'000 kg	'000 kg	\$'000
1951-52			( 1 580	50	392	319	852	738		882
1952-53			1 819	61	1 010	231	1 222	1 465	_	1 210
1953-54	n.a.	n.a.	₹ 362	173	506	238	1 006	1714		864
1954-55			673	195	301	243	1 313	2 452		1 112
1955-56			L 576	116	291	170	1 108	2 625	-	1 012
1956-57	472	958	1 100	33	235	180	954	2 664	_	1 216
1957-58	458	907	414	60	384	128	1 088	1 888		1 016
1958-59	438	923	644	93	360	171	1 250	2 148	_	1 328
1959-60	469	968	711	147	413	167	1 329	2 043	_	1 612
1960-61	478	1 072	373	545	439	166	1 436	2 402	_	1 920
1961-62	514	1 122	935	1 325	451	128	1 554	2 164	_	2t294
1962-63	511	1 208	512	528	377	155	1 501	2 663		2 254
1963-64	507	1 191	639	385	370	160	1 620	1 932	49	2 203
1964-65	503	957	915	227	299	209	1 513	1 323	225	2 686
1965-66	596	1 154	1 362	196	493	212	1 787	394	726	3 300
1966-67	618	1 200	1 037	427	455	270	1 946	341	1 999	3 653
1967-68	585	1 118	1 624	343	685	300	1 752	225	2 786	4 473
1968-69	566	1 160	1 401	174	947	248	1 700	125	2 108	4 864
1969-70	553	1 123	1 578	67	801	219	1 390	50	2 608	4 043
1970-71	529	1 090	610	201	793	335	1 607		3 488	5 984
1971-72	588	1 207	581	507	859	433	1 469	52	2 971	6 808
1972-73	589	1 235	915	461	497	392	1 583	515	2 172	5 739
1973-74	594	1 268	598	371	1 187	7 728	1 514	1 158	2 060	7 014
1974-75	616	1 343	760	631	651	828	1 525	1 261	2 108	6 928
1975-76	607	1 347	143	473	1 238	375	1 229	690	2 429	8 511
1976-77	640	1 439	37	573	1 130	413	1 117	498	2 368	11 662
1977-78	655	1 466	194	611	1 710	590	1 192	400	2 525	12 609
1978-79	727	1 620	38	451	1 490	626	1 305	1 077		14 636
1979-80	760	1 687	7	283	1 210	688	1 340	3 829	3 100 1 314	20 463
1980-81	781	1 678	2	200	1 288	1 037	1 553	3 359	3 743	26 514
1981-82	n.a.	n.a.	i	417	1 086	994	1 713	3 339 7 577	4 194	32 896
1982-83	n.a.	n.a.	2	211	793	994 841	1 /13	11 573	2 968	
1983-84	n.a.	п.а.	16	137	614	623	1 805	8 702	4 769	31 140 39 133
	11.4.	n.a.	10	137	014	023	1 903	0 /02	4 /09	39 133

<sup>(</sup>a) Year ended December of the first year named.(b) Landed at Tasmanian ports; estimated live weight.(c) Includes crabs, squid, oysters and seaweed.

#### Principal Articles Produced in Factories, Tasmania

			Foodstuffs				
Year	Butter (a)	Cheese (factory and farm) (b)	Bacon and ham (cured weight) (c)	Flour (incl. wheatmeal for baking)	Aerated waters	Refined zinc	
	tonnes	tonnes	tonnes	tonnes	'000 litres	tonnes	
939-40	5 380	1 470	1 313	17 137	1 650	74 012	
949-50	5 614	428	1 007	24 714	4 510	85 122	
959-60	12 079	372	1 162	28 007	8 356	119 785	
960-61	10 552	399	1 138	26 388	8 656	127 957	
961-62	12 376	641	1 149	26 356	8 828	131 140	
062-63	13 405	681	1 201	26 442	9 683	138 391	
963-64	13 984	1 358	1 185	24 868	9 938	140 835	
964-65	14 218	2 388	1 190	25 367	10 310	141 006	
965-66	14 229	2 989	1 079	25 022	11 111	146 221	
966-67	14 541	3 822	1 262	24 470	11 583	146 227	
967-68	13 999	4 724	1 302	23 957	12 029	131 872	
968-69	16 017	5 820	1 416	23 826	12 644	151 094	
969-70	16 343	5 407	1 403	21 947	13 354	170 931	
970-71	15 273	5 556	1 803	22 264	14 049	162 271	
971-72	15 318	5 923	1 984	22 488	14 402	175 798	
972-73	12 947	7 218	1 902	31 698	15 236	193 782	
973-74	12 398	8 475	1 931	34 643	15 751	182 749	
974-75	12 196	12 387	2 169	34 938	14 845	152 749	
975-76	10 762	13 332	2 356	30 691	16 219	137 637	
976-77	9 707	13 156	2 434	32 427	18 786	170 685	
977-78	7 910	13 903	2 505	32 780	20 082	161 173	
978-79	7 075	17 494	2 457	34 901	19 834	204 623	
979-80	5 490	15 328	2 094	37 269	18 361	191 683	
980-81	4 234	14 147	2 375	37 811	19 397	188 471	
981-82	3 964	15 167	2 634	35 068	19 108	193 714	
982-83	5 768	14 100	2 661	n.p.	n.p.	185 482	
983-84	6 191	14 080	2 519	n.p.	16 623	187 399	

## Principal Articles Produced in Factories, Tasmania-continued

	Che	emicals, fertilisers,	etc.	g 1.1	Misce	llaneous
Year	Sulphuric acid	Super- phosphate	Sulphate of ammonia	Sawn, peeled and sliced timber (d)	Newsprint	Electricity (e)
	tonnes	tonnes	tonnes	'000 m³	tonnes	m kWh
1939-40	14 552	33 337	_	189.7	_	612
1949-50	42 747	69 943	_	298.2	30 961	1 062
1954-55	70 676	77 034	_	331.3	74 789	1 589
1959-60	129 077	104 260	58 525	400.4	89 931	2 532
				200.2	00.453	2 632
1960-61	137 178	106 285	62 574	388.3	89 452	
1961-62	138 636	121 143	62 319	351.6	91 199	2 733
1962-63	142 227	127 426	53 274	377.2	91 693	3 213
1963-64	161 381	134 233	43 506	403.2	93 516	3 409
1964-65	184 936	132 445	60 772	420.2	94 637	3 780
1965-66	198 551	162 441	65 135	421.2	94 707	3 896
1966-67	211 201	166 757	58 422	411.5	98 816	4 116
1967-68	185 303	145 968	13 086	413.5	94 135	3 773
1968-69	206 474	140 340	40 324	414.4	125 924	4 738
1969-70	266 449	133 245	40 563	413.7	173 314	5 140
					150 (03	5 451
1970-71	387 193	105 323	40 252	406.1	178 683	5 778
1971-72	558 658	104 763	41 358	412.8	181 477	5 902
1972-73	652 513	177 192	48 654	416.3	199 053	6 010
1973-74	570 156	180 458	33 191	414.3	200 852	
1974-75	517 052	103 253	54 701	410.2	196 240	6 095
1975-76	466 817	57 896	23 040	373.5	206 228	6 008
1976-77	506 338	101 281	12 291	368.1	206 590	6 842
1977-78	522 154	97 012	5 292	338.5	207 621	7 179
1978-79	414 644	151 489	6 045	320.6	208 143	7 748
1979-80	302 550	132 783	1 213	355.2	221 460	7 903
	252547	120.070	969	373.9	214 400	8 044
1980-81	253 547	139 869		327.2	219 429	8 122
1981-82	335 507	126 416	012	r 248.1	222 934	7 978
1982-83	292 323	104 324	913		219 006	8 144
1983-84	318 492	108 216	2 643	281.6	219 000	0 144

 <sup>(</sup>a) Includes butter equivalent of butter oil and from 1965-66 excludes farm production.
 (b) Source: Tasmanian Department of Agriculture up to 1978-79; Australian Dairy Corporation from 1979-80.
 (c) Includes non-factory production. From July 1970 all weights are on a bone-in basis; earlier figures include an element of unconverted bone-out weights.
 (d) Includes hardwood and softwood.
 (e) Mainly output of Hydro-Electric Commission.

<sup>(</sup>NOTE: Details of production of a number of important articles cannot be published because of confidentiality.)

(Chapter 14)

#### Manufacturing, Tasmania

	Number of	E	mployment	(a)	Salaries and	Value of	Value of	Value of		
Year	factories at end of year	Males	Females	Persons	wages paid (b) (\$'000)	materials used (\$'000)	output (c) (\$'000)	production (d) (\$'000)		Plant and machinery (\$'000)
1910	635	8 277	1 703	9 980	п.а.	n.a.	n.a.	n.a.	2 044	2 092
1915	589	7 161	1 259	8 420	1 567	4 387	8 431	3 823	2 265	2 457
1920	616	8 746	1 479	10 225	2 960	8 469	14 304	5 525	1 963	3 863
1924-25	675	9 016	1 982	10 998	3 776	6 885	15 685	7 251	4 209	13 457
1929-30	845	8 547	2 273	10 820	4 056	8 025	17 121	7 1 2 4	5 994	13 894
1934-35	926	8 321	2 234	10 555	3 204	6 260	14 446	6 3 1 6	5 390	12 138
1939-40	980	11 754	2 916	14 670	5 372	10 821	25 987	12 506	7 551	13 576
1940-41	1 002	12 341	3 498	15 839	6 1 1 9	12 377	27 735	12 584	8 474	15 098
1941-42	994	13 389	4 167	17 556	7 442	14 922	32 622	14 429	8 769	15 226
942-43	992	13 941	4 369	18 310	8 946	17 393	37 408	16 151	9 8 5 4	16 267
1943-44	994	14 697	5 094	19 791	10 387	19 144	41 696	18 091	10 586	16 129
944-45	1 006	14 756	4 755	19 511	10 017	19 934	42 714	17 805	10 983	15 934
1945-46	1 082	15 105	4 130	19 235	10 013	20 616	44 239	18 391	10 609	16 461
946-47	1 169	16 186	3 751	19 937	11 276	22 650	49 139	21 335	11 356	17 000
947-48	1 225	17 208	3 965	21 173	13 731	27 311	57 569	24 489	12 543	19 832
948-49	1 346	18 508	4 094	22 602	16 913	34 319	73 314	32 149	14 670	24 507
949-50	1 456	19 302	4 204	23 506	19 293	43 468	90 160	38 671	17 299	27 456
950-51	1 486	19 454	4 373	23 827	23 475	58 290	117 249	49 229	20 701	34 312
951-52	1 512	19 934	4 093	24 027	29 407	71 804	143 853	59 588	24 999	41 181
952-53	1 504	19 621	3 874	23 495	31 953	67 333	142 007	60 997	29 925	45 240
953-54	1 545	20 249	4 340	24 589	34 763	74 851	155 822	66 129	53 993	54 984
954-55	1 597	21 045	4 407	25 452	37 727	84 930	177 202	76 228	59 206	59 758
955-56	1 594	22 128	4 934	27 062	43 196	95 882	207 558	91 862	93 158	80 849
956-57	1 595	22 482	5 188	27 670	47 273	101 274	220 780	97 365	112t946	89 672
957-58	1 655	23 081	5 003	28 084	50 641	100 582	227 651	103 660	118 906	93 719
958-59	1 666	23 504	4 920	28 424	51 656	103 093	236 587	108 602	123 660	96 451
959-60	1 683	24 408	5 254	29 662	57 573	119 822	268 050	120 392	144 024	107 315
960-61	1 766	24 811	5 347	30 158	60 659	122 508	275 902	124 892	147 099	112 632
961-62	1 760	24 742	5 328	30 070	61 440	126 128	283 547	127 874	159 149	121 589
962-63	1 764	25 453	5 302	30 755	64 837	131 100	303 920	142 033	163 919	138 159
963-64	1 746	26 221	5 612	31 833	70 582	154 613	341 065	152 571	168 403	141 651
964-65	1 805	26 768	5 812	32 580	76 515	175 920	381 549	167 251	209 010	155 336
965-66	1 792	28 041	6 274	34 315	82 963	188 678	404 581	175 606	211 923	158 672
966-67	1 771	28 364	6 5 1 5	34 879	90 756	201 027	437 964	194 571	233 983	169 159
967-68	1 797	28 550	6 628	35 178	96 236	203 084	445 076	198 019	263 364	184 683

- (a) Commencing with 1927-28, the number of persons employed is the average over the whole year; prior to the date the number represents the average over the period of operation.

  (b) Excludes amounts drawn by working proprietors.

  (c) Value of goods manufactured and work done.

  (d) Value of output less recorded costs of manufacture other than labour.

(Chapter 14)

Economic Censuses: Manufacturing, Tasmania (a)

Establish- Year mention	Employment (average over whole year) (c)			Wages and	Turnover (b)	Purchases. transfer in and selected	Value added	Fixed capital expenditure	
(b)	operating at 30 June	Males	Females	Persons	salaries	(Б)	expenses (e)	(f)	(g)
	no.	no.	no.	no.	\$.000	\$'000	\$'000	\$.000	\$.000
968-69	951	24 892	6 182	31 074	95 065	487 109	301 739	197 464	35 080
969-70	945	25 371	6 389	31 760	102 104	541 636	317 546	226 083	49 443
971-72	933	24 856	6 151	31 007	119 411	595 612	359 300	245 068	25 944
972-73	912	24 668	6 016	30 684	130 703	678 763	394 628	283 420	24 893
973-74	935	25 203	6 324	31 527	161 386	818 049	494 785	340 250	24 798
974-75	628	23 699	5 153	28 852	194 883	905 656	558 632	402 255	53 146
975-76	667	22 827	4 926	27 753	211 327	1 029 579	577 393	456 029	43 936
976-77	617	23 042	4 724	27 766	246 014	1 199 311	694 445	533 288	34 472
977-78	599	22 022	4 944	26 966	258 341	1 245 979	742 171	497 979	47 243
978-79	552	21 386	4 680	26 066	266 099	1 401 463	861 690	549 372	77 116
979-80	543	21 520	4 638	26 158	298 196	1 656 092	1 045 867	653 770	55 933
980-81	558	21 942	4 586	26 528	346 551	1 867 080	1 175 515	713 445	60 208
981-82	555	21 345	4 464	25 809	370 167	1 898 046	1 237 455	713 091	84 417
982-83	528	19 597	4 488	24 085	387 714	1 968 504	1 260 435	695 135	45 035

- (a) Details are not comparable with those contained in the preceding table.
  (b) No census was conducted in 1970-71. From 1974-75 figures exclude details for single establishment enterprises with less than four persons

- (a) Includes working proprietors and employees at separately located administrative and ancillary units.
   (c) Includes working proprietors and employees at separately located administrative and ancillary units.
   (d) Turnover plus increase (or less decrease) in the value of stocks less purchases, transfers in and selected expenses.
   (e) Includes transfers in of goods from other establishments of the enterprise, charges for commission and sub-contract work, repair and maintenance expenses, outward freight and cartage, motor vehicle running expenses and sales commission payments.
   (f) Comprises sales of goods, transfers out of goods to establishments of the same enterprise, bounties and subsidies on production, all other operating revenue from outside the enterprise and capital work done for own use, rental or lease.
- (g) Outlay on fixed tangible assets less disposals.

(Chapter 15)

Hydro-Electric Commission, Tasmania (a)

Year	Installed generator capacity (a)	Number of retail consumers	Gross revenue	Working expenses and other charges
	kW	no.	\$.000	\$'000
1929-30	49 000	n.a.	692	636
1934-35	54 250	n.a.	814	754
1939-40	104 500	n.a.	1 212	1 172
1944-45	160 500	55 073	1 776	1 588
1949-50	184 500	75 927	2 938	2 926
1959-60	541 150	117 266	14 570	14 932
1964-65	856 550	131 593	25 009	23 500
1965-66	807 550	134 679	26 293	25 569
1966-67	849 150	135 941	28 299	27 058
1967-68	945 300	139 886	27 627	28 607
1968-69	1 005 600	143 551	33 638	31 824
1969-70	1 031 600	146 958	37 296	35 095
1970-71	1 281 200	149 911	40 151	40 070
1971-72	1 309 200	152 934	46 286	46 278
1972-73	1 352 400	156 570	49 511	49 297
1973-74	1 342 400	160 307	52 730	54 026
1974-75	1 442 400	163 479	62 295	61 870
1975-76	1 462 400	167 507	72 699	72 312
1976-77	1 492 400	171 847	80 372	80 292
1977-78	1 636 400	176 005	95 519	95 269
1978-79	1 780 400	179 861	109 130	108 930
1979-80	1 780 400	183 607	120 505	119 993
1980-81	1 780 400	187 072	139 107	136 712
1981-82	1 860 300	r 189 723	165 236	159 270
1982-83	1 940 200	192 034	181 741	185 811

<sup>(</sup>a) Excludes King and Flinders Islands.

(Chapter 16)

Value of Retail Sales by Commodity Groups, Tasmania (\$ Million)

				(*	inion,					
Year	Groceries	Butchers' meat	Other food (a)	Beer, wine, spirits (b)	Clothing, drapery, footwear	Domestic hardware (c)	Electrical goods (d)	Furniture, floor coverings	Other goods (e)	Total (excl. motor vehicles, etc.)
1952-53 (f)	17.3	9.1	11.9	10.7	25.7	3.1	4.6	4.9	16.3	103.6
1956-57 (f)	23.4	11.1	15.1	14.8	30.4	3.3	6.3	6.4	20.3	131.1
1961-62 (f)	28.6	13.9	20.0	17.0	35.3	4.1	10.7	7.2	29.3	166.1
1962-63	29.3	14.9	21.4	16.9	36.0	4.4	11.7	7.8	30.5	172.9
1963-64	31.6	15.5	20.6	18.5	38.4	4.4	11.5	7.9	31.8	180.2
1964-65	33.6	17.1	21.9	18.9	40.6	4.4	11.3	8.5	34.7	191.0
1965-66	35.2	17.8	22.7	20.3	41.6	4.5	11.2	8.7	36.3	198.3
1966-67	36.5	19.4	24.2	23.3	45.5	5.1	11.7	10.1	39.2	215.0
1967-68		19.9	26.1	25.0	48.9	5.5	12.4	11.2	41.6	227.9
1968-69 (f)		20.7	23.1	30.9	49.5	8.8	13.4	12.6	49.9	257.6
1969-70		21.0	30.7	28.7	62.2	6.1	13.3	12.9	49.4	256.0
1970-71	45.2	21.3	32.6	30.7	55.6	6.7	13.6	13.5	52.9	272.1
1971-72	50.0	22.2	33.9	32.4	59.7	7.5	15.4	14.4	55.8	291.3
1972-73	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	319.5
1973-74 (f)	63.8	26.2	35.8	47.8	76.1	14.4	24.5	21.4	64.5	374.5
1974-75		31.3	47.2	61.7	100.3	17.1	36.1	28.9	86.1	485.4
1975-76		31.2	49.7	68.8	101.6	22.1	48.3	31.7	91.6	532.3
1976-77		35.7	58.0	77.5	117.3	24.5	56.4	34.6	103.6	618.0
1977-78	120.8	37.6	64.0	91.6	133.1	29.0	53.1	37.8	118.4	685.4
1978-79		48.2	72.8	100.5	141.2	29.5	53.2	38.8	134.3	750.5
1979-80 (f)		55.9	71.9	105.6	151.0	28.2	53.0	39.0	144.3	816.9
1980-81	171.5	55.2	99.0	114.0	154.6	35.5	54.1	39.9	161.9	885.7
1981-82		60.3	106.8	122.3	166.6	38.8	57.0	42.3	178.9	968.1
1982-83		63.6	91.4	119.5	186.6	39.5	69.0	41.5	184.4	1 030.5
1983-84	276.1	73.4	99.7	129.7	198.9	46.2	78.6	49.7	202.3	1 154.6

<sup>(</sup>a) Includes fresh fruit and vegetables, confectionery, soft drinks, ice cream, cakes, pastry, cooked provisions, fish, etc., but excludes some delivered milk and bread.
(b) Excludes sales from licensed clubs up to 1982-83.
(c) Excludes basic building materials (e.g. timber, roofing tiles, etc.), builders' hardware and supplies.
(d) Includes radios, televisions and accessories, musical instruments, domestic refrigerators, etc.
(e) Includes tobacco, cigarettes, newspapers, books, stationery, chemists' goods, jewellery, etc.
(f) Census figures.

(Chapter 16)

Value of Trade by Sea and Air and Vessels Entered and Cleared, Tasmanian Ports

		Import	ts		Exports					
Year	Overseas	Inters	state		Overseas (b)	Interst	ate (b)		Vessels entered Tasmanian ports	
	By sea and air	By sea (a)	By air	Total (a)	By sea and air	By sea	By air	Total	Overseas a	nd inter-
	\$.000	\$'000	\$.000	\$,000	\$'000	\$,000	\$'000	\$,000	no	'000
1830	. п.а.	n.a.	1	r 510	) n.a.	1		ſ 292	101	net tons
1840	, n.a.	n.a.	1	1 976		n.a. n.a.		1734	101 492	27 85
1850	n.a.	n.a.	1	1 318		n.a.		1 288	674	104
1860		450		2 136	1 544	380		1 924	806	116
1870	. 698	888		1 586		736		1 298	613	106
1880	. 738 . 1 594	2 000		2 738		1 456		3 024	654	205
1900	. 1 402	2 202 2 746		3 796		2 182		2 974	746	476
1910		(d)		4 148 n.a		2 144		5 222	741	619
1919-20	. 1626	(d)		n.a		(d) (d)		n.a.	979	1 211
1929-30	. 3 668	16 028	ļ	19 696	4 978	13 198		n.a. 18 176	841 1 076	632 1 390
1930-31	. 1 582	12 878		14 460		9 754		13 968	992	
1931-32	. 1130	11 938		13 068		9 980		14 086	980	1 319 1 307
1932-33	. 1128	12 464	i	13 592		9 790		13 372	1 030	1 461
1933-34	. 1 274	13 582	n.a.	. 14856		10 254	n.a.	15 020	1 066	1 547
1934-35	. 1 476	14 452	1	15 928		11 844		16 162	1 128	1 610
1935-36	2 498	17 134	ſ	19 632		13 116		18 618	1 191	1 977
1936-37 1937-38	2 586 3 858	18 858		21 444		14 376		21 198	1 317	2 093
1938-39	2838	19 854 20 166		23 712		16 500		22 274	1 377	2 202
1939-40	3 188	21 780		23 004 24 968		17 670 20 954		24 466 25 806	1 384 1 243	2 231
1940-41								1		1 512
1941-42	1 918	21 876 24 276		24 240		24 052		27 172	1 147	1 264
1942-43	2 300	26 236		26 194 28 536		28 566		32 312	1 031	1 030
1943-44	2 384	26 162	l	28 546		30 680		32 450	873	760
1944-45	1 664	27 796		29 460	5 062	35 288 36 708		37 586 41 770	804	796
1945-46	2 614	29 400	ļ	32 014		33 040		40 264	760 728	732 833
1946-47	3 626	37 810	i	41 436		32 932		43 094	751	957
1947-48	8 564	44 000	1	52 564	18 566	35 066		53 632	787	1 106
1948-49 1949-50	12 512 18 704	46 674 ] 51 218	J (e) 10 670	L 59 186		37 064		62 044	805	1 125
						42 672	(e) 3 996	76 604	862	1 183
1950-51 1951-52	25 058	60 636	18 326	104 020		53 740	6 392	108 646	905	1 279
1952-53	41 422 26 632	76 024 76 658	20 474	137 920		71 684	6 018	114 726	902	1 323
1953-54	26 098	87 438	19 936 22 164	123 226 135 700	43 696	72 804	11 568	128 068	1 012	1 480
1954-55	30 258	89 958	19 148	139 364	35 466 37 524	81 488 85 376	13 580 14 494	130 534	1 060	1 508
1955-56	24 884	99 608	21 166	145 658	40 608	100 630	18 762	137 394 160 000	1 081 1 030	1 620 1 586
1956-5/	27 764	105 788	20 020	153 572	45 004	108 654	18 112	171 770	1 161	1 737
1957-58	25 466	113 636	19 122	158 224	44 506	109 652	18 354	172 512	1 241	1 872
1958-59 1959-60	26 374 27 606	121 138	19 718	167t230	43 932	114 424	17 584	175 940	1 257	1 966
		130 014	19 210	176 830	47 730	137 530	20 818	206 078	1 308	2 287
1960-61	37 208	141 086	19 356	197 650	42 588	143 036	21 944	207 568	1 354	2 546
1961-62 1962-63	26 788 35 746	141 776	18 000	186 564	57 196	140 794	23 298	221 288	1 533	3 042
1963-64	35 /46 35 032	150 620 167 964	18 158	204 524	66 792	146 454	21 602	234 848	1614	3 474
1964-65	35 717	170 963	19 840 20 819	222 836 227 449	73 318 87 315	173 590 193 371	23 424	275 332	1 508	3 346
1965-66	43 585	192 732	21 123	257 441	92 007	212 785	25 770 25 575	306 456 330 367	1 472	3 412
1966-67	51 376	209 456	20 311	281 143	88 834	224 975	25 680	339 490	(f) 1 645 1 684	(f) 3 887 4 085
1967-68	45 024	220 065	20 590	285 679	76 888	233 694	26 941	337 524	1 676	4 102
1968-69 1969-70	37 509 46 998	241 398 257 441	21 051	299 958	102 061	265 476	25 825	393 362	1 795	4 645
			20 551	324 989	143 470	286 083	26 287	455 840	1 759	5 574
1970-71	45 719 39 749	269 022	19 777	334 519	143 198	277 669	27 103	447 970	1 639	5 338
1971-72 1972-73	45 045	281 576	20 622	341 947	178 950	302 608	29 374	510 932	1 754	5 937
1973-74	69 277	289 862 357 805	21 238 24 760	356 145	218 712	320 910	30 626	570 247	1 788	7 239
19/4-/5	100 616	402 081	26 850	451 843 529 547	259 745 226 154	404 382 379 933	34 566 31 699	698 692	1 631	7 225
1975-76	76 262	503 497	27 882	607 641	250 580	441 391	36 280	637 786 728 251	1 611 1 536	6 820 6 733
1976-77	94 622	564 231	30 909	689 762	338 657	485 850	35 160	859 667	1 592	7 258
1977-78	115 778	594 793	39 388	749 960	381 942	594 441		1 014 589	1 528	6 992
1978-79 1979-80	140 652 179 780	621 548	74 578	836 829	513 286	627 186	39 727	1 180 199	n.a.	n.a.
		935 584	53 481	1 168 845	646 827	772 531	32 141	1 451 499	n.a.	n.a.
980-81	172 456	973 685	60 922	1 207 063	658 013	837 042		1 540 226	n.a.	n.a.
981-82 982-83	166 032 r 179 819	1 031 330	61 187	1 258 548	647 617	879 421	47 525	1 574 562	n.a.	п.а.
983-84	202 786	1 084 743	74 552	1 339 113	r 773 133	904 983		1 728 949	n.a.	n.a.
	404 /00	n.y.a.	n.y.a.	n.y.a.	774 404	n.y.a.	n.y.a.	n.y.a.	n.a.	n.a.

<sup>(</sup>a) Data for 1979-80 onwards are not directly comparable with data for previous years because of revisions to estimating procedures to take account of inadequate documentation available for interstate imports by sea.
(b) Data for 1978-79 onwards are not directly comparable with data for previous years. From 1 July 1978 overseas export figures relate to all goods leaving Tasmania for overseas countries. Prior to that date export figures relate to only goods leaving Tasmania for overseas countries for which documents had been lodged with customs in Tasmania.
(c) In this section each vessel is recorded as an entry at the first Tasmanian port of call only; intrastate movements are excluded.
(d) Collection discontinued until 1922-23. (e) Not collected before 1949-50.
(f) From 1966-67 not comparable with previous years; details are now confined to vessels of over 200 registered net tons engaged solely in trade.

(Chapter 16)

Overseas and Interstate Exports of Selected Commodities, Tasmania

Year	Butter (incl. butte		Fresh fru apples and		Mea	,	Chee	se	Wool, grea	isy (a)
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
	tonnes	\$'000	tonnes	\$'000	tonnes	\$'000	tonnes	\$'000	tonnes	\$'000
1945-46	1 293	406	66 820	1 894	186	34	612	112	4 113	1 438
1946-47	1 340	688	19 908	1 028	312	83	993	180	5 275	2 706
1947-48	1 926	798	55 565	4 204	282	44	273	66	4 446	4 206
1948-49	2 475	1 268	31 481	2 366	789	122	181	41	6 365	6 758
1949-50	2 179	1 278	56 911	4 348	1 151	369	113	29	4 128	6 202
1950-51	1 958	1 173	64 841	6 828	915	302	63	17	5 446	18 688
1951-52	2 239	1 266	56 627	7 410	1 103	475	120	44	6 689	9 366
1952-53	2 397	1 802	77 288	11 578	1 753	818	39	18	7 643	12 030
1953-54	2 043	1 600	77 652	10 135	658	349	39	18	7 018	11 314
1954-55	3.944	3 026	72 112	8 950	1 676	814	73	39	8 011	12 190
1955-56	4 988	3 463	92 569	11 498	2 470	1 076	36	23	8 387	11 140
1956-57	6 101	3 452	58 836	7 936	2 074	883	102	73	9 392	16 198
1957-58	5 939	3 420	96 260	14 664	2 996	1 190	101	45	10 731	14 260
1958-59	7 065	4 828	87 781	11 338	5 469	2 415	69	51	11 415	12 106
1959-60	7 864	5 390	80 683	9 490	9 225	3 801	90	64	12 689	15 254
1960-61	5 419	3 298	92 730	11 226	6 896	3 212	60	47	11 068	12 560
1961-62	7 572	3 942	122 417	15 572	7 754	3 250	121	50	12 341	14 206
1962-63	8 597	4 368	108 438	17 508	9 933	4 737	578	269	11 919	15 338
1963-64	8 315	4 372	135 205	19 454	11 018	5 505	895	328	11 378	17 604
1964-65	10 374	5 9 1 4	99 410	14 260	12 881	6 645	1 707	761	13 756	16 593
1965-66	8 878	5 214	134 482	20 651	12 749	7 038	2 887	1 493	15 442	20 155
1966-67	9 140	5 259	96 085	11 872	13 727	7 939	3 530	1 642	16 238	20 373
1967-68	8 992	5 107	115 873	14 647	11 345	7 042	4 190	1 854	13 994	15 041
1968-69	9 243	5 129	96 242	13 154	12 910	7 989	1 930	884	15 798	18 592
1969-70	12 611	6 950	109 382	14 905	17 084	11 774	7 267	2 957	16 512	17 821
1970-71	10 664	5 954	96 670	13 474	15 755	10 706	6 259	2 589	17 145	14 350
1971-72	9 829	8 067	74 848	11 092	21 463	14 161	6 8 1 6	3 875	20 413	17 180
1972-73	7 437	6 104	84 066	11 566	23 061	20 368	6 6 5 6	4 085	17 735	34 579
1973-74	8 269	6 441	92 116	16 458	22 167	22 507	7 730	5 930	16 963	38 319
1974-75	5 012	4 460	57 473	10 261	18 456	12 237	10 386	7 922	15 947	26 640
1975-76	9 720	7 527	47 114	8 756	20 883	17 192	9 026	7 633	17 435	31 232
1976-77	4 363	3 851	24 847	5 732	22 951	20 281	14 552	12 317	16 204	33 685
1977-78	6 248	5 941	42 257	11 092	20 984	21 557	15 222	14 409	16 390	36 503
1978-79	2 561	3 146	40 405	11 794	24 569	37 240	16 516	18 247	16 306	38 756
1979-80	2 871	4 343	45 467	13 828	21 104	41 670	12 188	17 127	13 213	36 630
1980-81	1 510	2 703	39 932	12 467	19 718	35 890	13 302	22 414	16 356	48 422
1981-82	413	867	49 941	19 300	23 688	37 544	13 782	25 827	15 698	48 000
1982-83	1 265	3 725	39 184	22 507	30 392	53 285	11 029	23 410	15 293	48 161

(Chapter 16)

# Overseas and Interstate Exports of Selected Commodities, Tasmania

Year	(with	Sheep skins (with and without wool)		Refined zinc		Ores and concen- trates	Timber (dressed and undressed)	
	Quantity	Value	Value	Quantity	Value	Value	Quantity	Value
-	tonnes	\$,000	\$'000	tonnes	\$,000	\$,000	$m^i$	\$.000
1945-46	1 890	326	4 599	75 454	4 214	1 668	73 206	1 132
1946-47	1 811	480	4 607	80 378	4 674	2 298	75 344	1 228
1947-48		452	5 681	66 411	4 906	3 074	96 188	1 584
1948-49		564	6 688	78 667	8 832	3 832	116 094	2 104
1949-50	1 500	816	5 580	81 999	9 964	4 076	146 625	2 930
1950-51	1 014	1 688	9 266	80 836	15 054	5 704	135 668	3 230
1951-52	1 434	1 232	7 498	77 090	18 606	11 714	134 604	4 428
1952-53	1 512	1 020	11 572	91 557	19 342	9 722	122 230	5 112
1953-54	1 333	1 098	13 552	97 593	17 222	8 544	135 751	6 700
1954-55	2 230	1 590	12 476	87 746	16 574	8 138	147 389	7 156
1955-56	1 873	1 356	14 674	100 611	19 888	10 836	140 938	6 570
1956-57	2 122	1 796	15 766	105 314	19 662	10 700	146 502	6 874
1957-58	2 138	1 674	16 112	105 541	18 190	8 088	132 242	4 6 1 6
1958-59	2 565	1 288	14 166	116 271	20 054	4 824	153 378	6 844
1959-60	3 216	2 078	17 524	115 680	22 922	5 952	177 931	8 952
1960-61	3 071	1 786	19 188	109 664	21 020	6 760	149 657	9 554
1961-62	3 050	1 892	21 278	133 012	23 680	6 030	134 033	8 588
1962-63	2 885	1 904	19 842	136 302	23 778	6 338	142 979	9 858
1963-64	3 359	2 844	21 918	134 201	27 910	9 102	168 480	11 176
1964-65		1 953	24 139	141 263	37 327	9 570	189 832	12811
1965-66	3 268	2 465	24 077	137 257	38 331	11 302	174 297	12 145
1966-67		2 456	24 102	155 273	41 249	12 560	187 474	13 672
1967-68	2 722	1 369	25 487	120 312	33 106	17 816	183 817	13 492
1968-69	3 988	2 148	27 563	139 479	34 006	44 018	194 936	15 329
1969-70	3 236	1 790	27 784	163 847	42 625	63 478	207 242	16 238

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(Chapter 16)

Overseas and Interstate Exports of Selected Commodities, Tasmania—continued

Year	Sheep skins (with and without wool)		Textile yarn and fabrics	Refined zinc		Ores and concen- trates	Timber (dressed and undressed)	
	Quantity	Value	Value	Quantity	Value	Value	Quantity	Value
	tonnes	\$'000	\$.000	tonnes	\$.000	\$'000	m³	\$'000
1970-71	3 710	1 684	28 425	142 755	38 163	81 604	200 583	17 201
1971-72	3 765	1 799	29 938	194 259	55 149	88 777	202 331	17 385
1972-73	3 618	3 280	31 680	208 349	63 707	87 543	224 828	27 970
1973-74	2 303	2 926	41 174	190 293	77 143	94 381	270 248	22 556
1974-75	2 8 1 6	2 258	31 454	139 253	74 298	91 240	213 428	30 636
1975-76	2 943	2 413	41 656	138 243	74 926	92 588	238 440	25 867
1976-77	2 334	2 765	35 811	162 001	98 318	144 947	313 227	37 083
1977-78	2 565	3 565	33 285	167 870	87 129	164 014	260 738	38 282
1978-79	2 504	3 708	43 815	214 242	122 263	202 415	238 145	38 609
1979-80	2 683	5 417	37 184	185 327	127 264	248 942	291 453	88 238
1980-81	2 330	3 231	45 047	194 115	135 276	n.p.	265 488	85 254
1981-82	2 713	3 395	46 095	199 774	162 700	n.p.	255 366	82 206
1982-83	2 239	2 841	50 073	203 759	164 424	n.p.	267 441	70 031

<sup>(</sup>a) Excludes greasy wool on exported skins.

(Chapter 17)

Motor Vehicle Registrations, Tasmania (a)

	^	Motor vehicles	on the register	at end of ye	ar				
		cars and				Motor	notor vehicles re	gistered dur	ing year
Year	Number ('000)	Persons per vehicle registered	Commercial vehicles ('000)	Motor cycles ('000)	Total ('000)	cars and station wagons	Commercial vehicles	Motor cycles	Total
1924-25	5.8	36.9	(b) 0.8	2.7	9.3	n.a.	n.a.	n.a.	n.a.
1929-30	12.5	17.6	(c) 2.2	4.8	19.5	1 627	(c) 552	939	3 118
1934-35	12.9	17.8	3.0	3.9	19.8	982	422	171	1 575
1939-40	17.6	13.6	5.2	3.4	26.2	1 400	540	176	2 116
1949-50	25.3	10.9	12.9	4.9	43.2	3 311	1 565	886	5 762
1950-51	28.8	9.9	15.1	5.3	49.2	4 187	2 319	960	7 466
1951-52	32.5	9.1	16.8	5.7	55.1	4 267	2 073	938	7 278
1952-53	35.4	8.6	19.4	5.7	60.5	3 368	1 724	474	5 566
1953-54	40.0	7.7	19.7	5.6	65.4	4 178	1 896	450	7 064
1954-55	44.9	7.0	21.5	5.3	71.7	5 738	2 285	417	8 440
1955-56	48.0	6.6	21.9	4.8	74.7	5 457	2 179	332	7 968
1956-57	51.7	6.3	22.6	4.4	78.6	5 309	1 988	340	7 637
1957-58	55.9	6.0	23.9	4.4					
1958-59	59.1	5.7	25.0		83.8	5 337	1 944	225	7 506
1959-60	63.7	5.4		3.6	87.7	5 362	2 113	176	7 651
1939-00	03.7	3.4	26.4	3.1	93.2	6 527	2 115	96	8 738
1960-61	68.1	5.1	26.7	2.6	97.4	6 723	2 058	61	8 842
1961-62	72.8	4.9	27.4	2.4	102.6	6 931	1 778	59	8 768
1962-63	77.9	4.6	27.5	1.9	107.3	9 003	1 986	52	11 041
1963-64	84.4	4.3	28.0	1.7	114.1	10 268	2 343	53	12 664
1964-65	91.3	4.0	28.9	1.5	121.7	10 522	2 389	69	12 980
1965-66	96.8	3.8	29.7	1.5	128.0	10 133	2 878	207	13 218
1966-67	101.7	3.7	30.2	1.6	133.5	10 390	2 611	380	13 381
1967-68	107.7	3.5	31.1	2.2	141.0	11 738	2 412	751	14 901
1968-69	113.7	3.4	32.2	2.8	148.7	10 845	2 529	781	14 155
1969-70	118.6	3.3	32.6	3.1	154.3	11 399	2 456	799	14 654
1970-71	124.9	3.1	32.9	3.5	161.3	11 792	2 550	794	15 136
1971-72	130.2	3.0	33.8	3.8	167.8	11 961	2 492	978	15 431
1972-73	135.4	2.9	34.6	4.5	174.5	12 970	2 813	1 343	17 126
1973-74	141.2	2.8	35.3	6.1	182.6	13 674	2 846	2 600	19 120
1974-75	150.3	2.7	36.6	7.4	194.3	16 097	3 980	2 749	22 826
1975-76	156.9	2.6	39.1	6.8	202.8	14 410	3 971	1 831	20 212
1976-77	162.7	2.5	40.5	6.2	209.4	14 520	4 260	1 428	20 208
1977-78	171.9	2.4	41.2	5.0	218.1	13 884	4 170	972	19 026
1978-79	178.8	2.4	42.9	4.8	226.6	13 928	3 401	892	18 221
1979-80	177.2	2.4	47.5	4.7	229.5	13 333	3 454	1 089	17 876
1980-81	183.5	2.3	49.0	4.9	237.4	13 563	3 444	1 278	18 285
1981-82	186.5	2.3	50.5	5.1	242.1	12 210	3 302	1 110	16 622
1982-83	191.0	2.3	52.5	5.8	242.1	11 279		990	
1983-84	191.0	2.2	54.8	6.1	249.3 255.9	13 214	3 209 3 791	1 027	15 478 18 032
1,05-07	173.0	4.4	34.0	0.1	233.9	13 214	3 /91	1 027	18 032

<sup>(</sup>a) Includes State Government and Commonwealth Government-owned vehicles but excludes those belonging to the Defence Services.
(b) Trucks only. (c) From 1929-30 includes trucks, utilities, panel vans and omnibuses.

Motor Vehicles on Register and Traffic Accidents, Tasmania

	Motor vehicles on the register at end of year (a)			Traffi	c accidents	involving casual	ties	
			Acc	cidents	Persons killed		Person	Persons injured
Year	Number ('000)	Persons per vehicle registered	Number	Per 10 000 vehicles registered (b)	Number	Per 10 000 vehicles registered (b)	Number	Per 10 000 vehicles registered (b)
1949-50	43.2	6.4	969	242	64	16.0	1 154	288
1954-55	71.7	4.4	864	127	57	8.3	1 111	163
1959-60	93.2	3.7	743	82	79	8.7	1 004	111
1964-65	121.7	3.0	1 180	100	97	8.2	1 692	143
1965-66	128.0	2.9	1 291	103	88	7.0	1 955	157
1966-67	133.5	2.8	1 356	104	102	7.8	2 081	159
1967-68	141.0	2.7	1 268	92	112	8.2	1 990	145
1968-69	148.7	2.6	1 400	97	122	8.4	2 228	154
1969-70	154.3	2.5	1 413	93	122	8.0	2 268	150
1970-71	161.3	2.4	1 396	89	124	7.9	2 031	129
1971-72	167.8	2.3	1 371	83	118	7.2	1 984	120
1972-73	174.5	2.3	1 423	83	83	4.8	2 052	119
1973-74	182.6	2.2	1 454	81	126	7.0	2 046	114
1974-75	194.3	2.1	1 466	77	120	6.3	2 061	108
1975-76	202.8	2.0	1 502	74	107	5.3	2 160	107
1976-77	209.4	2.0	1 606	77	103	4.9	2 3 1 4	110
1977-78	218.1	1.9	1 674	78	118	5.5	2 402	112
1978-79	226.6	1.9	1 537	69	98	4.4	2 1 1 3	95
1979-80	229.5	1.8	1 510	66	77	3.4	2 140	94
1980-81	237.4	1.8	1 634	70	120	5.1	2 186	94
1981-82	242.1	1.8	1 532	64	114	4.8	2 209	92
1982-83	249.3	1.7	1 1 1 4	46	73	3.0	1 524	62
1983-84	255.9	1.7	1 333	52	76	3.0	1 856	73

<sup>(</sup>a) Includes cars, commercial vehicles, motor cycles and Commonwealth-owned vehicles other than Defence Services' vehicles. (b) Based on average number of motor vehicles (including motor cycles) on the register.

(Chapter 17)

#### Metropolitan Transport Trust Passenger Services, Tasmania (a)

•/		Hobart	and Launceston	services			E 40.
Year	Route Hobart			Launc	eston	Revenue (b)	Expenditure (c)
	open for traffic	Vehicle kilometres	Passenger journeys	Vehicle kilometres	Passenger journeys		
		daily average	daily average	daily average	daily average	\$'000	\$.000
955-56	121	10 602	50 028	4 060	18 006	1 304	1 690
960-61	198	16 964	49 946	5 058	17 462	1 997	2 586
961-62	203	17 022	48 994	5t055	17 217	1 955	2 629
962-63	208	16 732	48 051	4 736	16 279	1 905	2 537
963-64	222	17 537	47 554	4 775	15 731	1 882	2 584
964-65	224	17 566	45 985	4 598	15 183	1 829	2 606
965-66	243	17 239	43 383	4 760	14 767	1 964	2 749
966-67	248	17 323	42 967	4 843	14 728	2 124	3 008
967-68	259	17 408	41 803	4 947	13 953	2 158	3 122
968-69	286	17 745	40 675	4 730	13 365	2 270	3 250
969-70	290	17 886	39 932	4 801	13 018	2 332	3 358
970-71	290	18 055	40 058	4 633	12 521	2 321	3 741
971-72	291	17 703	37 584	4 585	11 708	2 639	3 949
972-73	308	17 106	36 572	4 530	11 397	2 659	4 333
973-74	314	17 585	38 027	4 604	11 988	2 751	5 283
974-75	364	19 031	40 791	4 650	12 055	2 9 1 6	8 299
975-76	357	19 850	40 646	4 704	11 969	3 000	8 084
976-77	358	20 791	39 507	4 219	11 283	2 862	8 945
977-78	365	21 405	39 314	4 269	10 767	3 547	10 151
978-79	366	20 685	34 870	4 148	9 552	4 186	10 672
979-80	368	20 333	34 384	4 345	9 515	4 183	11 300
980-81	387	21 551	34 161	4 306	9 368	4 896	13 458
981-82 (d)	395	20 922	28 803	4 175	7 836	5 625	14 524
982-83	400	20 871	29 107	4 015	7 762	5 710	15 453
983-84	421	20 630	29 589	4 002	7 781	5 641	16 715

<sup>(</sup>a) Includes tram, omnibus and trolley-bus services originally under municipal control but taken over by Metropolitan Transport Trust on 1.7.55. Trams ceased operating: Hobart 21.10.60; Launceston 13.12.52.

(b) Prior to 1955-56 includes government grants; see note (a) above.

(c) Includes interest, redemption and depreciation.

<sup>(</sup>d) The method used for calculating passengers changed after a change in ticketing procedures revealed inaccuracies.

(Chapter 17)

# Postal Services, Tasmania

		Letters and	Mail posted in received from		Regis- tered
	Year		Newspapers and packets	Parcels	articles
		'000	'000	'000	'000
1929-30	***************************************	39 956	7 128	198	307
1939-40		33 874	5 525	132	314
1949-50		50 038	8 440	368	674
1959-60		43 020	9 629	233	456
1960-61		43 242	9 432	231	404
1961-62		42 603	9714	242	390
1962-63		45 202	9 183	237	379
1963-64		47 452	9 340	232	371
1964-65		49 108	9 549	263	371
1965-66		51 710	10 309	288	375
1966-67		55 594	10 531	302	379
		55 273	10 141	303	349
		56 516	9 425	282	325
1969-70		58 824	8 953	300	312
1970-71		57 916	8 640	353	313
1971-72		54 780	6 773	352	268
1972-73		6	3 187	358	228
1973-74		6	3 272	289	203
1974-75		5	9 644	308	193
1975-76		44 829	5 528	220	132
1976-77		45 406	5 627	310	126
1977-78		48 690	7 569	342	124
1978-79		51 828	12 252	379	121
1979-80		53 902	10 962	444	119
1980-81		57 204	6 628	544	127
		51 503	5 773	543	127
1982-83		49 603	5 986	548 548	116
		50 669	6 459	550	108
		20 009	0 439	330	100

(Chapter 17) Telecommunication, Radiocommunication, Broadcasting and Television, Tasmania

	Telegrams		Telephones			Radiocommunication, broadcasting and television stations			
Year	received	Despatched to	Telephone exchanges	Telephone services connected at end of period		Radio- communi- cation	Broad- casting	Tele- vision	
	from other countries	places within Australia		Lines Instru- ments					
	'000	'000	no.	'000	'000	no.	no.	no.	
1929-30	19	455	360	12	15	20	3		
1939-40		471	357	15	19	25	ำเ		
1949-50	36	952	370	23	31	198	11		
1959-60	43	537	391	47	63	882	11	ž	
1964-65	52	550	365	59	82	2 574	12	4	
1965-66	60	582	349	62	86	2 951	12	4	
1966-67	53	621	331	65	89	3 561	12	4	
1967-68		575	312		93			4	
1968-69	24	562	288	67		3 856	12	4	
1969-70	24			70	98	4 377	12	4	
	24	542	273	75	105	4 994	12	4	
1970-71	36	499	257	78	114	5 499	12	4	
1971-72	36	458	238	80	113	5 892	12	5	
1972-73		473	230	85	110	6 200	12		
973-74		472	224	90	118 127	6 390 6 570	12 12	5 5	
974-75		424	212		133				
975-76		356		96		7 347	12	5	
976-77		298	206	100	140	7 915	12	5	
977-78		242	198	105	146	8 687	15	5	
079 70			197	112	155	(b) 15 612	15	5	
978-79 979-80		178 135	196 196	118	164	15 008	15	5	
		133	130	125	174	15 383	16	5	
1980-81		122	197	133	202	13 746	17	5	
1981-82		107	197	139	192	13 413	17	5	
1982-83		91	197	145	212	21 204	17	5	
1983-84		74	197	151	231	21 609	18	5	

<sup>(</sup>a) From 1967-68 excludes telegrams received, details of which are no longer available. (b) Includes licensed Citizens Band Radio Service operators from 1977-78.

# STATISTICAL SUMMARY

(Chapter 18)

Fire, Marine and General Insurance: Expenditure on Claims, Tasmania (\$`000)

Year	Claims	Year	Claims
939-40	357	1970-71	13 214
		1971-72	15 279
944-45	357	1972-73	18 249
949-50	942	1973-74	23 507
		1974-75	29 979
954-55	2.743	1975-76	29 952
959-60	5 404	1976-77	42 010
		1977-78	50 279
964-65	7 854	1978-79	55 373
965-66	9 153	1979-80	60 244
966-67	16 158		
967-68	16 890	1980-81	75 036
968-69	10.865	1981-82	90 638
969-70	12 285	1982-83	77 254

(Chapter 18)

# Banking, Tasmania (\$'000)

Year ·	Trading banks (including Commonwealth Trading Bank) (a)		Savings banks (b)		Trading banks (including Commonwealth Trading Bank) (a)			Savings banks (b)	
	Deposits	Advances	Debits to customers' accounts (c)	Depositors' balances at end of year	Year	Deposits	Advances	Debits to customers' accounts (c)	Depositors' balances at end of year
935-36			•	13 636	1960-61	76 454	48 010	32 600	94 776
936-37				14 430	1961-62	78 952	49 340	32 080	102 460
937-38				15 384	1962-63	83 178	53 176	35 068	112 856
938-39				16 792	1963-64	86 210	55 122	37 062	124 770
939-40				17 036	1964-65	94 604	54 176	41 340	135 736
	n.a.	n.a.	n.a.	4	1965-66		55 214	43 105	148 401
					1966-67		60 460	47 103	167 106
940-41				17 882	1967-68	117 811	69 297	51 222	177 827
941-42				18 944	1969-69	124 473	72 394	55 896	190 043
942-43				22 348	1969-70	131 501	77 603	61 173	199 790
943-44				28 426					
944-45				33 828					
945-46	34 560	7 346	5 778	40 894	1970-71	133 587	86 976	64 177	217 663
946-47	35 504	10 168	6 748	41 712	1971-72		. 88 098	69 970	242 856
947-48	37 360	14 954	7 894	43 144	1972-73		99 192	85 291	288 986
948-49	39 620	20 084	9 398	44 826	1973-42		121 077	103 041	328 029
949-50	44 114	22 834	11 210	48 544	1974-75	229 851	137 189	119 447	382 326
, , , , , , , , , , , , , , , , , , , ,		22 00 1	11 210	10 3 1 1	1975-76	277 377	157 951	150 536	430 618
950-51	53 444	26 636	14 740	54 310	1976-77	348 613	207 635	179 932	477 134
951-52	61 474	33 378	17 712	60 238	1977-78	375 773	250 144	193 310	530 457
952-53	58 270	33 440	17 700	64 156	1978-79	415 180	300 811	220 074	587 755
953-54	62 286	37 800	19 876	67 894	1979-80	425 910	345 930	256 249	642 129
954-55	65 826	43 670	21 432	71 618					
955-56	68 562	44 582	23 242	74 422					
956-57	72 976	40 406	25 200	77 518	1980-81	445 257	394 596	287 683	698 917
957-58	73 736	41 360	25 800	80 482	1981-82 r		432 701	318 201	759 111
958-59	75 218	44 828	27 600	84 924	1982-83		441 385	337 704	938 178
959-60	79 574	45 948	31 000	92 712	1983-84		448 367	366 752	1 103 459

 <sup>(</sup>a) Average of weekly figures.
 (b) Commonwealth, trustee and private. Private savings commenced operations in Tasmania as follows: ANZ, September 1961; National, May 1962; CBA, July 1962; CBC, March 1963; and Bank of Adelaide, November 1970.
 (c) Excludes debits to Government accounts at Hobart City branches.

(Chapter 18)

# Instalment Credit for Retail Sales, Tasmania (a) (\$'000)

	Amount financed during period (b)							Balances outstanding at end of period	
Year	Motor vehicles (c)		Household and personal goods		Total all goods		Type of business		
	Non-retail businesses	Retail businesses	Non-retail businesses	Retail businesses	Non-retail businesses	Retail businesses	Non-retail businesses	Retail businesses	
965-66	18 017	400	11 126			543	37 495	7 645	
966-67	19 025	422		160		607	38 777	7 050	
967-68	21 909	430		058		397	43 141	6 457	
968-69 969-70	21 001	821	13 751			573	44 205	6 826	
970-71	23 353 25 485	925 1 215	13 816			094 405	46 537	7 317 7 293	
971-72	28 240	1 117	13 705 13 511			403 868	50 453 54 463	7 293 7 097	
972-73	32 695	616	14 579			890	60 860	6 497	
	Finance businesses	Other businesses	Finance businesses	Other businesses	Finance businesses	Other businesses	Finance businesses	Other businesses	
973-74	32 278	457	3 394	5 489	35 672	5 946	51 512	5 621	
974-75	40 409	371	4 028	5 753	44 437	6 124	63 544	4 352	
975-76	45 612	282	6 8 1 9	5 752	52 431	6 034	78 038	4 371	
976-77	54 738	175	7 465	5 951	62 203	6 125	95 463	4 137	
977-78 978-79	54 967	_	6 163	5 063	61 130	5 063	104 029	3 117	
979-80	48 714 39 814	_	6 761	2 753	55 475	2 753	95 716	1 486	
980-81	39 814 37 286	_	7 116 6 969	1 048 1 142	46 930 44 255	1 048 1 142	86 164 80 220	1 495 1 580	
981-82	35 388		8 873	1 661	44 253 44 261	1 142	79 132	2 072	
982-83	30 034	_	8 328	1 553	38 362	1 553	74 726	2 3 3 0	
983-84	31 353		10 980	2 275	42 333	2 275	72 189	2 989	

<sup>(</sup>a) A break in continuity of the series occurs from 1973-74. The classification for the pre-1973-74 categories 'retail businesses' and 'non-retail businesses' differs from the subsequent categories 'finance businesses' and 'other businesses' mainly in the treatment of incorporated finance subsidiaries of retailers. These were formerly included in the category 'retail businesses' but are subsequently covered in 'finance businesses'.

outsinesses.

(b) Includes time payment, budget account, and personal loan schemes associated primarily with financing of retail sales of goods. However, it excludes the hiring charges, interest and insurance costs associated with these types of contracts.

(c) Includes new and used cars, boats, caravans, trailers and motor parts and accessories but excludes commercial type vehicles.

# Appendix C

#### CHRONOLOGY

## The Year 1984

## January

Tasmania won its Sheffield Shield match against Victoria by an innings and two runs with a day to spare. The Americas Cup went on display at the Tasmanian Museum and Art Gallery. Condor won the King of the Derwent yacht race. Thousands of dollars worth of regenerated forest, saw log and pulp wood were destroyed by fire. One road fatality was recorded in Tasmania during the Christmas-New Year holiday period. Charles Davis Ltd, owners of Fitzgeralds, bought McKinleys Pty Ltd for \$1 million. Tasmania's members of parliament planned a 21 per cent pay increase. The Prime Minister, Mr Hawke, warned that big pay increases for State parliamentarians would endanger economic recovery. The Cascade Brewery Co. Ltd accepted the takeover offer of the South Australian group, B. Seppelt and Sons Ltd and C.C. Bottlers Ltd. Tasmania's members of parliament made it clear that they would not bow to Commonwealth Government pressure to cut their 21 per cent pay rise. Marihuana plants with an estimated street value of \$150 000 were seized when police raided a plantation on the outskirts of Smithton. The Tasmanian Public Service Association began an urgent investigation into the reasons why the Retirements Benefits Trust sold its shareholding in the Cascade Brewery Co. Ltd for 25 cents a share below the highest bidder. Funds totalling \$277 502 to be made available under the Commonwealth Government's Community Employment Program for four projects in Tasmania, creating 22 jobs. Ian Sinclair was elected leader of the National Party. Roger Woolley, Tasmania's wicket keeper in the Sheffield Shield competition, was selected to tour the West Indies as a member of the 16-man Australian cricket squad. The Hobart City Council made known its intention to turn the 122 hectare Knocklofty Reserve into a recreational area for picnicking, cycling, horseriding and walking. Industrial Equity Ltd gained control of Cascade Brewery Co. Ltd. Tasmania refused to sign the Commonwealth Government's Medicare agreement until a list of questions concerning the State's position, particularly in financing the scheme, was answered.

#### February

The State Government's 15 cent debit tax on withdrawal transactions came into force. The United Launceston Citizens' Committee continued to push for a greater Launceston area under the new leadership of Mrs Sheena Butler. Medicare commenced in Australia. Viscount Geoffrey won the Hobart Cup. The Minister for Industrial Relations, Mr Bingham, threatened to impose \$1 000 fines on EZ workers who were engaged in a campaign of bans and limitations. Sir Peter Crisp, one of Tasmania's leading judicial figures, died at the age of 71. The four week old strike at Goliath Cement ended. Ownership of Ipec Holdings Ltd, which owns Federal Hotels Ltd, operators of Tasmania's two casinos, was transferred to a shelf company with assets of only \$5. Goliath Portland Cement Co. Ltd's workers went on strike again only 48 hours after a four week strike was settled. Peter Clough snared 8-95 against Western Australia. The figures were the best first class cricket figures by a Tasmanian bowler this century and the third best ever recorded by a Tasmanian. Federal assistance to upgrade Hobart Airport to full international standard was rejected by the Prime Minister, Mr Hawke. Federal cabinet met in Hobart for the first time since the election of the Hawke Labor Government. The \$48.5 million Bowen Bridge was opened by the Prime Minister. Three Tasmanian drive-in cinemas closed (Eastside, Somerset and East Devonport), resulting in the loss of 40 jobs. The HEC was fined \$750 in the Hobart Magistrate's Court on two charges of polluting

the Pieman River. Mrs Kath Venn was reprimanded by the ALP's disciplinary tribunal for supporting Senator Harradine against ALP candidates in the last election. The seven day strike by 94 Australian Workers' Union members at Goliath Portland Cement Company ended. The Launceston Cup was won by Martian's Son.

#### March

The Tasmanian Wilderness Society launched a campaign for the creation of a hectare world class national park in Western Tasmania. C. G. Brettingham-Moore was appointed puisne judge of the Tasmanian Supreme Court to replace Mr Justice Everett. The Tasmanian Supreme Court to have a seventh judge to clear a 'serious backlog' of criminal and civil cases. The Shann Inquiry recommended immediate further development of the new Launceston General Hospital at a cost of \$34 million. Mr Ray Groom, Federal Liberal member for Braddon, announced that he would not contest the next Federal election. The Premier, Mr Gray, offered to trade his \$319 million compensation claim on lost South-West dam jobs for the \$1.5 billion submarine construction venue and exclusive 200 mile zone fishing rights. Northern municipal council elections saw an increase in voter turnout in most municipalities. Those elected were: Cr Trevor Roach, Mr Geoff Ledgerwood, Cr Geoff Saxon, Mr Harry Stacpoole. Mr Brian Broadby was elected Lord Mayor of Hobart. Municipal and marine board elections were held on the North-West and West Coasts. The Commonwealth Government ruled out any South-West compensation deals with the Tasmanian Government concerning the site for the Navy submarine contract. The State Opposition released a paper which revealed that 50 000 Tasmanians could be unemployed by the year 2000. A violent wind storm caused damage estimated at hundreds of thousands of dollars as it ripped through the North-West Coast. The APPM King's Cup and National Regatta began at Lake Barrington. Oarsmen were vying for a place in Australia's squad for the Los Angeles Olympic Games. The Commonwealth Government offered the Tasmanian Government \$270 million as South-West compensation settlement; the State Government began preparing a counter bid to the package. The lack of firm commitment to fund alternative works programs beyond the end of the year was seen as a major weakness in the Commonwealth's compensation offer. Tasmania's largest fish processing company, Allied Fisheries Pty Ltd, appeared likely to be taken over in a multi-million dollar deal. \$3 million, part of the South-West compensation package, would be used to upgrade Hobart Airport to give a limited international capacity. APPM and Forest Resources would pay increased royalties to the State Government for a greater use of forest resources. The first stage of Tasmania's first privately financed and owned eel farm was opened. The Launceston City Council announced its intention to use the Local Government Act to try to force surrounding municipalities into sharing the cost of regional facilities. The State Government Health Department started an anti-smoking campaign.

## April

15 000 people at Lake Barrington watched NSW win the APPM King's Cup. The course was regarded as a likely venue for future world championships. Domestic airfares rose by 2 per cent. 50 employees (one third of the total) at Cleveland Tin Mine were retrenched. North-West members of the Australian Medical Association decided against strike action in the Medicare contracts row. The Minister for Fisheries, Mr Beswick, asked police to investigate allegations against the Tasmanian Fisheries Development Authority. The Premier called for an unequivocal assurance from the Commonwealth Government that it would continue the subsidy on passenger services to Tasmania. Former Tasmanian Supreme Court judge, Mr Everett, may be appointed to arbitrate on Tasmania's dam compensation claims. The Australian Conservation Foundation campaigned for more national parks to be declared in Tasmania to protect the State's rainforests. The Tasmanian Government accepted, in principle, the Commonwealth \$270 million South-West compensation offer. Cr Ross Baird was elected Warden of St Leonards, deposing Cr Brookes. Tasmania's consumers of bulk electricity hit out at their critics after the release of a report demonstrating their importance to Tasmania and the State's economy. More than 5 000 people rallied to the cause of nuclear disarmament in Hobart in the largest anti-nuclear march seen in the city. Tasmania faced industrial chaos as a result of the

arrest of union pickets at Burnie wharf. Work in Tasmania's West Coast mines and HEC sites stopped as a result of a meeting of more than 400 striking unionists at Burnie. Launceston hockey player Penny Gray was selected in the Australian women's team for the 1984 Olympic Games in Los Angeles. Peter Clough, Tasmania's premier fast bowler, moved to Western Australia to improve his cricketing prospects. Mr Richard Southee was appointed Master of the Supreme Court. The Legislative Council voted 11-6 to defeat a Government move to relate MP's pay rises to public sector wage movements. Mr Gray told the George Town Council that the Government would not agree to a coal-fired thermal power station at Bell Bay. The State Government unveiled a model and topographical map of its controversial \$30 million irrigation scheme for South-East Tasmania. Non-striking workers at West Coast mines were stood down and hundreds more faced retrenchment. Federal Hotels Ltd began planning an \$8 million seven-storey accommodation wing for its Wrest Point Hotel Casino. A group of Tasmanian fishermen called for the abolition of the Tasmanian Fisheries Development Authority.

## May

Tasmania's first test-tube baby, a boy, was born. The State Government won its battle to link parliamentary salaries to rises awarded to its public servants. Agfest '84 organised by Tasmanian Rural Youth, was held at Symmons Plains. The Mt Lyell Mining and Railway Co. announced it would cut back its workforce by 50. Interstate beer supplies started arriving in Tasmania to replenish dwindling hotel stocks caused by an indefinite strike by Cascade Brewery workers. The State Government agreed to investigate development of the historic Abt railway at Queenstown as part of a drive to boost tourism on the West Coast and increase employment. The Premier said the government would do everything in its power to extend the life of the Mt Lyell Mine at least until alternative sources of employment could be found for the mine's workforce. A three month search for the Tasmanian Tiger began at a secret site in the Central Highlands. The Que River mine dispute entered its 10th week. APPM stood down 460 employees as production at its Burnie mill continued to slow down because of a two week old dispute. The Tasmanian Aboriginal Centre began a campaign of direct negotiations with big Tasmanian companies for land rights. In the Legislative Council elections, Mr Braid (Mersey) and Mr McKendrick (Cornwall) were elected. Mr Hodgman (Huon) was returned unopposed.

#### Tuno

The Wrest Point Convention Centre was opened. Mr Alby Broadby, the member for Gordon, was elected president of the Legislative Council. The Commonwealth Government announced that it would give Tasmania \$26 million to buy a West German replacement for the Empress of Australia. Brambles Industries Ltd and the State Government announced they were going to begin a joint shipping service between Burnie and Melbourne. A dispute on the future of the laid-up cargo ship, the Roger Rougier, threatened the \$26 million Federal grant to buy the new Bass Strait passenger ferry. Fire caused \$1 million worth of damage to the Supavinyl Products factory at Bell Bay. The North Broken Hill Company announced a \$520 million takeover offer for EZ Industries Ltd. The new State Cabinet was announced. Mr Pearsall was unanimously elected Deputy Premier. Fire caused approximately \$1 million damage to Hobart's historic Theatre Royal. Mrs Carmel Holmes entered parliament as a result of Mr Bingham's resignation. Mr Hawke and Mr Gray signed an agreement for \$270 million compensation to Tasmania for the loss of the Gordon-below-Franklin power scheme. 4 public hospitals began sending patients home in readiness for a 24 hour strike by nurses. Fire severely damaged the old Hobart Railway Station. Nurses began a 24 hour strike, the first ever by Tasmanian nurses. The Premier announced a \$6.9 million road construction project to make Queenstown the gateway to the South-West World Heritage Area.

#### July

Mr Kevin Newman, Federal member for Bass announced he would not contest his seat in the next election. Dramatic changes to the Federal electoral boundaries in Tasmania were announced. The changes effectively created four urban divisions and one large rural division, Truganini, broadly replacing Wilmot and much of Braddon and Bass.

Braddon's name was changed to Lyons. (Following public comment the proposed Truganini became Lyons and the name Braddon was retained for the north-west electorate.) The creation of a \$4.1 million sports complex providing facilities for up to 10 000 people was recommended by a committee investigating sports facilities in Launceston. A section of the new dual carriageway on the Southern Outlet in Hobart was opened to traffic with one-way traffic flow extended along Macquarie and Davey Streets. Approximately 450 men were stood down at the Savage River iron ore mine and the Port Latta pelletising mill as a result of an indefinite strike by members of the Federated Engine Drivers' and Firemen's Association. Hobart barrister, Mr Peter Underwood, was appointed to the newly created position of seventh judge of the Supreme Court of Tasmania. Rain fell in many parts of the State relieving drought conditions. The State Government announced plans to spend \$6 million of dam compensation funds on upgrading the Hobart Airport. The National Companies and Securities Commission started the biggest investigation in Tasmania's corporate history into share transactions between the two takeover bidders for the big Tasmanian hotel chain, Four Seasons Ltd. The overseas vessel Nils Holgersson (later renamed Abel Tasman) was named as the definite replacement for the ageing ferry Empress of Australia.

## August

The Director of Environmental Control, Mr J. F. Pottinger retired. Hobart's Macquarie and Murray Streets intersection was declared the most historical and prestigious commercial city intersection in Australia. Metal alloy producer, Temco Pty Ltd, announced plans for a \$57 million upgrading at its Bell Bay processing plant. Two men and a woman were killed instantly when a light plane and a glider it was towing, crashed near Woodbury. Michael Grenda of Launceston became Tasmania's first Olympic gold medallist as a member of Australia's cycling team which won the 4 000 metre teams pursuit in Los Angeles. The Premier stated that the State Government may keep the existing electoral boundaries for the House of Assembly if the Redistribution Committee failed to modify its proposed changes. The Premier confirmed that Hobart Airport would be upgraded to handle 747 Jumbo Jets capable of flying within a radius of Tasmania and Japan. The State Government announced that it would hand over all Aboriginal remains held in the Tasmanian Museum and Art Gallery in Hobart and the Queen Victoria Museum at Launceston to Tasmanian Aboriginal descendants. Mr Peter Patmore (ALP) replaced Mr Michael Barnard in the House of Assembly. The Federal Budget included tax cuts, increased social welfare benefits and a 10 per cent tax on wine. The Charles Davis retail empire challenged the State Government's retail trading hours policy by opting to open its Harry's Discount Garden Centres seven days a week. ANL announced that the Brisbane Trader would no longer use the port of Devonport.

#### September

Shipping company William Holyman and Sons announced its intention to drop its Hobart and Burnie freight services and centre its operations on Devonport as its port of call. Australian Newsprint Mills at Boyer to spend \$8 million on a major upgrading program designed to improve efficiency and allow the company to further diversify its range of paper products. Legislation was introduced into State Parliament to give Tasmanian police wide ranging powers to intervene in domestic violence. It was announced that the last stage of the Pieman River Power Development Scheme would be called Reece Dam after former Tasmanian Premier, Mr Eric Reece. Mr Reece was one of the first proponents of damming the Pieman, as Minister for Lands and Works, in 1948. The State Budget included the introduction of a \$5 000 per job subsidy designed to create work for 2 000 Tasmanians and a record allocation for a capital works program of \$561.2 million. It was announced that the Tasmanian Fisheries Development Authority would be replaced by a department and placed under ministerial control. The State Government agreed to tighter restrictions on shop trading hours. Tasmanian electricity charges to rise by 7.5 per cent. Fire gutted the 160 year old Green Gate building in Murray Street, Hobart. Damage was estimated at over \$200 000. Mr Neil Robson (Bass) announced his resignation from State Cabinet and was succeeded by Mr Brendan Lyons. Tasmania's first mobile breath analysis units were brought into use by police.

#### October

The Empress of Australia was stranded in Devonport due to industrial action forcing 320 passengers to seek alternative transport to Melbourne. Carolyn Hurd was crowned Miss Tasmania 1985. The Commonwealth Government provided \$3 million for the upgrading of Hobart Airport. Mr Hawke announced 1 December as the date for the next Federal election. Mr Darrel Baldock MHA, accepted appointment as coach of the St Kilda Football Club in Victoria. This raised the issue of 'part-time' attendance in parliament. Plans were released for a \$14 million car park and retail shopping and office block in Collins Street, Hobart. The State Government released details of a new employment program providing employers with \$5 000 for each new employee. The Labor party moved unanimously to ban part-time politicians from its ranks therefore placing the political future of Mr Darrel Baldock in jeopardy. (Mr Baldock later withdrew from his appointment as coach of the St Kilda Football Club.)

#### November

Hobart experienced 28 millimetres of rain in an hour causing thousands of dollars damage to low lying areas in and around Hobart. Increased rates for no-fault insurance premiums were announced by the Minister for the Motor Accidents Insurance Board. The Commonwealth Government allocated \$15 million for road construction projects in Tasmania. Following objections by professional planners and architects in Hobart to the design, size and appearance of the proposed \$50 million international hotel, Premier Gray requested that the architects who designed the hotel develop an alternative design to 'address public concern'.

#### December

The State Government proposed that the Launceston and St Leonards Councils amalgamate and be replaced by an administrator. The Launceston City Council was prepared to go along with the idea. However, the St Leonards Council decided to oppose the proposal. Greenpeace protesters clashed with Hobart police when they attempted to stop the French Antarctic supply vessel Polarbjorn from docking. Tasmania's Island State Credit Union introduced a telephone linked system allowing members to conduct financial transactions through home computers. Hundreds were stranded as a result of a TAA airline dispute. It was announced that a four or five storey \$4 million office block and retail development, blending old and new architecture, would be built on Hobart's historic waterfront. The Hobart City Council installed its first parking voucher machines. Senate election results were: on primary votes the Liberals had 40.9%, Labor 41.4%, Democrats 5.9% and the Nuclear Disarmament Party 2.6%, with the Liberal candidates Smith (Bass), Burr (Lyons), Miles (Braddon), Hodgman (Denison) and Goodluck (Franklin), holding all five House of Representative seats. On Christmas Eve, the Senate election was declared with Senators Aulich, Townley, Coates, Devlin, Archer and Watson being returned and Senator Sanders to take his seat from July 1985. The Launceston International Velodrome, costing \$6 million, was officially opened. A crewman went missing off Yahoo II and was presumed drowned whilst competing in the Sydney to Hobart Yacht Race. It was the first time in the 40 year history of the race that a life had been lost other than by natural causes. Heavy seas caused a record number of retirements. Line honours went to Lion New Zealand and the winner on handicap was Indian Pacific.

# PUBLICATION OF TASMANIAN STATISTICS

## HOW TO OBTAIN CURRENT PUBLICATIONS

#### General

The Tasmanian Office of the Australian Bureau of Statistics is located in the Commonwealth Government Centre at 188 Collins St, Hobart. Requests for statistical publications can be made by calling at this address; by phoning the Information Officer on Hobart 209 409; or by writing to the Deputy Commonwealth Statistician, G.P.O. Box 66A, Hobart 7001. Those requiring particular publications on a regular basis should ask to be placed on the publications mailing list.

Service to the public is not restricted to the distribution of publications. If no publication adequately covers the subject matter of the inquiry, then a special extraction of the data required may be undertaken if they are readily available from the basic records held in the office. The guide, *Catalogue of Publications* (1101.0), includes descriptions of all publications together with a detailed subject index and is available free of charge.

#### Historical

Before the appointment of the first Government Statistician in Tasmania in 1867, statistics had been published in the official 'Blue Books' compiled by the Colonial Secretary during the period 1822-1855, and in volumes entitled Statistics of Tasmania after self-government was granted.

By the Commonwealth and State Statistical Agreement Act 1924, the Tasmanian Parliament ratified an agreement for the establishment of an office in Tasmania of the Australian Bureau of Statistics, such office to meet the statistical needs of the State Government; provision was made for the Deputy Commonwealth Statistician, a Federal Government officer, to hold, at the discretion of the State Government, the title of (State) Government Statistician. The first officer appointed in this way was L. F. Giblin, D.S.O., M.C., who had previously been the State Government Statistician. (It was not until the late 1950s that similar arrangements were made in the other Australian States.)

Statistics from 1804

In the Archives Office of Tasmania, the following series are available:

- (i) Statistical Account of Van Diemen's Land or Tasmania, 1804 to 1854 compiled by Hugh M. Hull (Office of the Colonial Secretary).
- (ii) Official 'Blue Books' for the period 1822-1855.
- (iii) Statistics of Tasmania—annual publications from 1856 to 1922-23.
- (iv) Statistics of the State of Tasmania—annual publications commencing 1923-24 and continuing to 1967-68. (Copies of these volumes are held at the University Library, the State Library in Hobart, the Public Library in Launceston and the Tasmanian Office of the Australian Bureau of Statistics.) Although the bound volume entitled Statistics of the State of Tasmania has been discontinued as from the 1967-68 issue, the component parts are still published as separate bulletins.

Copies of publications listed under (i), (iii) and (iv) above, are available for inspection at the Tasmanian Office of the Bureau.

### Current Publications of the Tasmanian Office

The Tasmanian Office of the Australian Bureau of Statistics is engaged in a continuous publication program, the statistics appearing in either 'for sale' or 'not for sale' publications.

The 'not for sale' publications (publications available free of charge) can be further dissected into annual bulletins and press releases. The press releases are issued with a view to making the statistical information available as soon as possible after compilation. Bulletins contain greater detail than press releases, but because of time taken to compile and print, are issued some time after the period to which they refer. The two principal 'for sale' publications issued by the Tasmanian Office of the Bureau are the Tasmanian Year Book and Pocket Year Book of Tasmania.

The following table lists all recent publications issued by the Tasmanian Office. A similar table is included on the back cover of each issue of the *Monthly Summary of Statistics* and all annual bulletins, showing the latest available issues and their dates of publication.

Publications of the Tasmanian Office of the Australian Bureau of Statistics (a)

Cat. No.	Publication
	General
1101.6	Index of Towns, Localities and Standard Area Codes irr
1301.6	Tasmanian Year Book (\$19.50; \$22.70 posted) a
1302.6	Pocket Year Book of Tasmania (\$2.80; \$3.50 posted) a
1303.6	Monthly Summary of Statistics (\$1.20; \$2.10 posted) m
1304.6	Compendium of Local Government Area Statistics irr
1305.6	Tasmania at a Glance a
1306.6	Major Economic Indicators q
	Demography and Social
2201.6	Census of Population and Housing 1981: Characteristics of Persons in Hobart Suburbs irr
2202.6	Census of Population and Housing 1981: Characteristics of Persons in Launceston Suburbs irr
2401.6	Census of Population and Housing 1981: Characteristics of the Population and Dwellings in Local Government Areas irr
3203.6	Age Distribution of the Estimated Resident Population in Local Government  Areas irr
3204.6	Population Statistics a
3302.6	Divorces a
3303.6	Births a
3304.6	Deaths a
3305.6	Marriages a
4101.6	Social Report (\$3.00; \$4.20 posted) irr
4203.6	Tertiary Education a
4204.6	Government Schools a
4205.6	Non-government Schools a
4503.6	Prison Statistics a
4504.6	Police Statistics a
4505.6	Children's Court Statistics a
4506.6	Lower Court Statistics a
4507.6	Higher Court Statistics a
	Trade and Finance
5401.6	Interstate Trade a
5501.6	Local Government Finance (\$1.20; \$2.10 posted) a
5603.6	Friendly Societies, Report on a
	Labour, Wages and Prices
6103.6	Employment, Earnings and other Labour Related Statistics a
6201.6	Labour Force Statistics a

# Publications of the Tasmanian Office of the Australian Bureau of Statistics (a)—continued

Cat. No.	Publication
	Labour, Wages and Prices
6222.6	Job Search Experience of Unemployed Persons (Excluding Persons who were Stood Down) a
6301.6	Industrial Accident Statistics (\$1.00; \$1.70 posted) a
6401.6	Prices and Price Indexes a
	Agriculture
7111.6	Principal Agricultural Commodities, (Preliminary) a
7221.6	Livestock and Livestock Products a
7321.6	Crops and Pastures a
7322.6	Fruit a
7411.6	Agricultural Land Use and Selected Inputs a
7501.6	Agricultural Commodities Produced, Value of a
7601.6	Household Fish Consumption and Non-Commercial Fishing Activities irr
	Manufacturing and Mining
8201.6	Census of Manufacturing Establishments, Summary of Operations by Industry Class a
8202.6	Census of Manufacturing Establishments, Details of Operations and Small Area Statistics (\$1.90; \$2.80 posted) a
8203.6	Sawmilling, Woodchipping, etc. Statistics q
8301.6	Miscellaneous Indicators of Production m
8401.6	Mining a
	Tourism, Retail Trade and Building
8622.6	Retail Establishments and Selected Service Establishments:  Details of Operations by Industry Class irr
8623.6	Retail Establishments and Selected Service Establishments: Industry and Commodity Details for Statistical Retail Areas irr
8624.6	Retail Establishments and Selected Service Establishments:  Hotels and Accommodation irr
8625.6	Retail Establishments and Selected Service Establishments:  Commodity Sales and Service Takings irr
8626.6	Retail Establishments and Selected Service Establishments: Industry and Commodity Details by Size of Establishments irr
8635.6	Tourist Accommodation q
8731.6	Building Approvals m
8741.6	Dwelling Unit Commencements Reported by Approving Authorities m
8752.6	Building Activity q
8780.6	Building and Related Statistics a
	Transport
9302.6	Motor Vehicle Census irr
9303.6	Motor Vehicle Registrations m
9405.6	Road Traffic Accidents Involving Casualties q
9406.6	Road Traffic Accidents Involving Casualties a

<sup>(</sup>a) Publications are free of charge unless a price is shown. The name of each publication is followed by a symbol indicating the frequency of publication as follows: m - monthly, q - quarterly, a - annual, irr - irregular.

## TASMANIAN STATISTICS IN CENTRAL OFFICE PUBLICATIONS

Although publications of the Tasmanian Office of the Australian Bureau of Statistics make available statistics on many aspects of the State, there are some fields in which additional or more frequent information is available in publications of the Central Office.

### How to Obtain Central Office Publications

Central Office priced publications may be bought direct from the Australian Government Publications and Inquiry Centres at 113 London Circuit, Canberra or 162 Macquarie St., Hobart, or from the Tasmanian Office of the Australian Bureau of Statistics. A standing order may also be placed with the Bureau on a pre-paid basis. In addition to publications for which a charge is made, there are other Central Office publications which may be obtained free of charge by 'phoning Canberra (062) 52 6627 or Hobart (002) 209 409 or by writing to Information Services, Australian Bureau of Statistics, P.O. Box 10, Belconnen, A.C.T. 2616.

# Subject Matter of Central Office Publications

The fields of statistical inquiry covered in Central Office publications are very wide (about 270 different titles are issued annually) and the best way to obtain a guide to the material available is to write to: The Australian Statistician, P.O. Box 10, Belconnen, A.C.T. 2616 and ask for the booklet Catalogue of Publications (1101.0). Copies of this guide are also available at the Tasmanian Office of the Bureau. This free, comprehensive guide lists the publications of the Central Office and of the State offices; in addition, it contains a subject index to information covered by Central Office publications. Readers with interest in a particular field are invited to call at, or write to, the Tasmanian Office which is in a position to give advice on what publications are available.

# INDEX OF SPECIAL ARTICLES

Special articles are indexed to broad subject areas rather than to detailed items; e.g. those of an historical nature are indexed under the entry 'Historical Articles'. The index covers all Year Books up to and including this edition.

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